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DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1994

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Departments of Commerce, Justice, a...

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BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS
FIRST SESSION

SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

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Technology Administration and the National Institute of Standards and Technology 987

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DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1994

HEARINGS

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DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1994

TUESDAY, MARCH 23, 1993.

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE

WITNESSES

HON. RONALD H. BROWN, SECRETARY OF COMMERCE
ALAN P. BALUTIS, DIRECTOR, BUDGET, PLANNING AND ORGANIZATION
MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET
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JOYCE WALKER
LESLIE DOGGETT
LORETTA YOUNG, ACTING DIRECTOR, MINORITY BUSINESS DEVELOPMENT AGENCY

INTRODUCTION

Mr. SMITH. This morning we begin our hearings on the Department of Commerce fiscal year 1994 budget request with the new Secretary of Commerce. The total request for the Department is $3,515,000,000. This amount represents an increase of $455,000,000—or 15 percent—above the appropriations enacted to date for the Department for fiscal year 1993. Because we are hearing from the Secretary prior to the official release of the FY 1994 President's Budget, we do not have detailed budget justifications at this time.

[CLERK'S NOTE.—Subsequent to the hearing, the Commerce Budget in Brief was submitted. It has been inserted into the record at this point.]

[The information follows:]

THE
COMMERCE
BUDGET
IN
BRIEF

FISCAL YEAR 1994

U.S. DEPARTMENT OF COMMERCE
RONALD H. BROWN, SECRETARY

GLORIA GUTIERREZ,
ACTING CHIEF FINANCIAL OFFICER /
ASSISTANT SECRETARY FOR ADMINISTRATION

ALAN P. BALUTIS
DIRECTOR FOR BUDGET,
PLANNING AND ORGANIZATION

MARK E. BROWN
DIRECTOR
OFFICE OF BUDGET

FOREWORD

The Department of Commerce is requesting $3,516 million in 1994, an increase of $455 million from the FY 1993 enacted appropriation. Of this amount, $518 million is part of the President's investment program and is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package. This budget is fully consistent with the President's economic plan for stimulating the American economy and for providing long–term investments. Commerce can play a leading role in supporting this effort, and in FY 1994, the Department's programs will make major contributions to the President's plan for economic recovery. Overall, the 1994 Commerce budget will support essential mission requirements to expand trade programs, construct a National information infrastructure conduct periodic censuses, improve economic data, automate the patent and trademark processes, improve research for standards used by American industry, expand coastal ocean research and climate prediction capabilities, modernize and restructure the National Weather Service, and upgrade the quality of services to minority businesses.

The COMMERCE BUDGET IN BRIEF provides a summary of the President's annual budget request to Congress by highlighting the budget request for FY 1994 and the changes from FY 1993. The major portion of the document furnishes information on appropriation accounts for which there are budget requests for FY 1994, or for which an appropriation was enacted in FY 1993. In addition, Commerce has submitted a FY 1993 supplemental budget request totalling $358 million. To help stimulate the economy, this request includes funding for programs that can spend funds in FY 1993, to create jobs in technology–oriented private sector companies. Supplemental funds are spread across five bureaus (the National Oceanic and Atmospheric Administration, the National Institute of Standards and Technology, the National Telecommunications and Information Administration, the Economic Development Administration, and the Minority Business Development Agency), and the specific programs are identified within the text describing each bureau in this BUDGET IN BRIEF.

The document presents for the Department, and for each program area, tables comparing permanent positions and amounts appropriated for FY 1993 and the estimate for FY 1994. In the legislation providing FY 1993 appropriations, the Congress gave the Secretary authority to transfer a limited amount of funding between accounts, in order to meet priority needs. With Congressional concurrence we have exercised that authority, and have transferred $16 million between several bureaus of the Department. The transferred funds are adding to base resources in support of urgent needs. For each appropriation account, data are presented on permanent positions and amounts by activities; for each activity, FY 1994 program changes from the FY 1994 base requirements are briefly identified and explained. For purposes of tracking changes from FY 1993 to FY 1994 in the bureau description material, the FY 1993 appropriation is used as a base.

The tables for each appropriation contain information substantially the same as the "Summary of Requirements" (salmon sheet) in the budget justification material submitted to the Appropriations Committees.

The document includes information on budget authority, outlays and employment, which will be useful to the general public in understanding the total program of the Department. The document also provides information on the Department's mission and objectives and FY 1994 budget requests requiring authorizing legislation.

Unless otherwise stated, all dollar figures cited or shown are in thousands of dollars.

April, 1993

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INTRODUCTION

ORIGIN

The U.S. Department of Commerce was established on March 4, 1913 (37 Stat. 7365; 15 U.S.C. 1501). Previously, labor and commerce activities were performed by the Department of Commerce and Labor established by Congress on February 14, 1903.

COMMERCE'S GOALS

A new generation of leadership takes over the White House and the Department of Commerce at a pivotal time in our Nation's history. President Clinton's mandate for change, and for reviving a sluggish economy by increasing investment and creating jobs for more Americans, directly involves the Department of Commerce and our array of technological, environmental, trade, economic and business programs. The Department is at the forefront of many of the growth and investment efforts that the President and Vice-President see as essential to improving our economy.

The Department's major goal in FY 1994 is to fully support the President's plans for revitalizing the Nation's economy. We have developed a three-part strategy to accomplish this:

- Economic stimulus activities to help jump-start the economy immediately;
- Long-term investment initiatives for sustaining new economic growth through infrastructure development and private sector job creation; and,
- Savings in Federal program costs and positions.

FY 1993 SUPPLEMENTAL STIMULUS AND SAVINGS REQUEST

Immediately after delivering his State of the Union address on February 17, 1993, President Clinton issued "A Vision of Change for America," a comprehensive outline of the Administration's FY 1993 and FY 1994 plans for getting the economy back on track. That proposal includes a number of initiatives for the Commerce Department, which are necessary components of any successful efforts as part of the FY 1993 economic recovery process.

As part of the President's FY 1993 stimulus package, Commerce requests $358 million for several high priority programs identified below. All of these programs have two major things in common –– they provide funding that can be used this year to stimulate the economy and increase jobs, and they pave the way for long–term investment programs in FY 1994 and beyond.

- $103 million for the Advanced Technology Program (ATP) within the National Institute of Standards and Technology (NIST). ATP provides Federal matching funds for industry–led research and development in pre–competitive generic technologies and manufacturing practices;
- $14 million for Information Infrastructure within NIST, expanding its research and development efforts in areas related to high–performance computing and high–speed networking for manufacturing applications;
- $64 million for the Information Highway demonstration initiative of the National Telecommunications and Information Administration (NTIA) to promote the development of a high speed telecommunications infrastructure linking schools, libraries, government agencies, and other producers of public information;
- $81 million to accelerate the National Oceanic and Atmospheric Administration's (NOAA) acquisition of equipment for several projects, including the modernization of the National Weather Service and NOAA's central data systems and, more efficient management of the Nation's fisheries, and global atmospheric research;
- $94 million for the Economic Development Administration (EDA) to provide assistance to economically distressed areas and to rebuild basic infrastructure. Resources will also be used to assist states impacted by recent disasters; to continue revitalization of Los Angeles; and, to assist communities adversely impacted by the closing of military bases and Department of Energy installations and by losses of major defense contracts; and,
- $2 million for the Minority Business Development Agency (MBDA) to continue program management activities.

As part of the President's commitment to cutting the cost of the Federal Government and the size of the workforce, the Executive Order 12839, "Reduction of 100,000 Federal Positions," proposes a 4% cut in positions by FY 1995. This would reduce Commerce by 2.5% or 909 positions from the originally approved FY 1993 level of 36,360 to a new level of 35,451 in 1994.

FY 1994 BUDGET REQUEST

The FY 1994 budget request for the Department of Commerce is $3.516 billion, an increase of $455 million or 15% from the FY 1993 appropriation level (exclusive of the FY 1993 supplemental request). FTE employment in 1994 for the Department will be 35,451.

The FY 1994 request carries forward the three-part program begun with the FY 1993 Supplemental request -- economic stimulus, long-term investment, and savings in Federal program costs and staffing. In FY 1994, the Department's initiatives will move into high gear. We will be putting emphasis on the investment component of our budget strategy.

Savings initiatives will help offset some of the increases being requested. Most significant among these savings will be an $88 million reduction in staff and administrative costs of the Commerce Department. We will save $29 million in full-time equivalent reductions (consistent with the requirements of E.O. 12839); $38 million from the elimination of the annual pay raise originally planned for January 1994; $19 million in administrative efficiencies; and, $2 million from limits on grant overhead costs. Reductions in accordance with E.O. 12837, "Deficit Control and Productivity Improvement in the Administration of the Federal Government," have already been included in bureau budget requests presented in this BUDGET IN BRIEF.

Other savings included in the FY 1994 budget follow:

- NOAA will eliminate low priority programs and demonstration projects, saving $67 million ($39 million in Operations, Research and Facilities, and $28 million in Construction);
- The Bureau of the Census will save a net $33 million through cyclical adjustments in the ongoing range of census activities;
- Trade Adjustment Assistance grants for firms will be eliminated, saving $13 million;
- The Bureau of Export Administration (BXA) will be reduced by $6 million reflecting reduced workload for export license applications; and,
- NTIA will transfer management of a portion of the Federal spectrum to the FCC for auction to the private sector. This will produce a total of $4.4 billion in revenues for the U.S. Treasury over the 1994 through 1998 period.

The Department of Commerce will be at the center of the Administration's FY 1994 plans for revitalizing the economy through economic stimulus and long-term investment. Some of the ways this role will be fulfilled by Commerce bureaus are highlighted below along with other priority programs.

Revitalizing America's technology capabilities to make our nation more competitive

Technology Administration

- The Technology Administration plays a leadership role in achieving the goals of the Administration's technology program, both within Commerce and through the intergovernmental process. To support this role, increases are proposed for funding of Technology Administration staff and to support the Japan Manufacturing Technology Fellowship Program

National Institute of Standards and Technology

- The Administration's commitment to improving the competitiveness of U.S. industry is demonstrated by the increase proposed for NIST. The NIST budget includes critical increases for core research programs, the information infrastructure program, the Federal Coordinating Council for Science Engineering and Technology (FCCSET) activities, along with growth in the ATP and the Manufacturing Extension Partnership (MEP). Increases for NIST must begin now in order to help lay the necessary foundation to support the competitiveness of U.S. industries in the 21st century.
- Additionally, as the President announced in Baltimore on March 11, NIST, DOE, NSF, and NASA are working with the Advanced Research Projects Agency (ARPA) to develop a coordinated, technologically–oriented defense conversion program. Although programmatic details have not yet been finalized, NIST is expected to administer over $100 million in DOD funding for manufacturing conversion / extension programs and in the area of technology development.

National Telecommunications and Information Administration

- In 1994, the National Telecommunications and Information Administration is requesting increases to promote U.S. competitiveness in the telecommunications industry. Specifically, NTIA will:
    - Initiate a National Information Infrastructure (NII) Grant Program to facilitate the creation of an advanced, high speed telecommunications infrastructure connecting the Nation's schools, researchers, healthcare providers, and other public information producers;
    - Develop, test, and evaluate radio–based performance standards for the telecommunications infrastructure development initiative;
    - Work to resolve technical and policy issues involved in implementing the National Research and Education Network (NREN); and,
    - Participate in critical international conferences and negotiations focused on telecommunications standards.

National Oceanic and Atmospheric Administration

- The NOAA budget includes the resources necessary to continue National Weather Service modernization programs. Production and installation of Doppler radars, automated surface observing equipment, advanced information processing and dissemination systems, and transition to the new streamlined field office structure will continue. FY 1994 represents the high water mark for funding requirements for the modernization initiative. Resources are also requested to meet production and launch schedules for the geostationary and polar–orbiting satellite systems.

- Funding is also requested to maintain current operating levels and services provided by the National Ocean Service, National Marine Fisheries Service, Office of Oceanic and Atmospheric Research, National Weather Service and National Environmental Satellite, Data and Information Service. Without additional resources, important products and services now provided will have to be curtailed. This will result in lost opportunities for economic growth, and increases in the loss of property and life resulting from delayed warnings of natural disasters.

- NOAA is one of the Commerce agencies with continuing participation in Federal Coordinating Council on Science, Engineering and Technology (FCCSET) initiatives for U.S. global change and high performance computing and communication. NOAA activities will continue in areas of National concern including analysis, modeling and simulation of patterns of global climate change and the application of advanced, supercomputer technology to this problem. Also additional funding is requested to continue NOAA's on–going data management modernization initiative.

Widening opportunities for economic recovery and investment

Economic Development Administration

- EDA is requesting $33 million to support the economic diversification of communities affected by defense reductions. Grants will be awarded to support technical assistance, construction of public facilities, and implementation of revolving loan funds.

- EDA is requesting $3 million to upgrade their management information systems environment. In addition, EDA will strengthen grant administration, increase budget, program and management analysis, and focus management resources on defense economic conversion.

Minority Business Development Agency

- Strong and sustained growth of the minority business segment of our economy is a goal of the Commerce Department and the Minority Business Development Agency. The requested $5 million increase will be used to strengthen the Enterprise Development program through the expansion of the Minority Enterprise Growth Assistance (MEGA) Center initiative into other regions.

Promote international trade in a global economy by improving the international trade climate for American business and industry

International Trade Administration

- The Department will continue to provide policy support to the U.S. Trade Representative to ensure completion of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) and the supplemental agreements to the North America Free Trade Agreement (NAFTA). In 1994, using base resources, ITA will undertake an extensive outreach program to educate the U.S. business community on the impact of these agreements.
- ITA is requesting $8.1 million to continue support for market reforms in the Newly Independent States (NIS) and expand export opportunities for U.S. firms. To accomplish this objective, ITA will continue and expand several NIS export promotion programs including the Special American Business Intern Training program, the Consortia of American Business in the NIS program and the NIS Business Information Service center, which were funded in FY 1993 using Agency for International Development funds.

Improving the quality of government statistical programs

Bureau of the Census and Economic and Statistical Analysis

- The President's budget request for the Census Bureau and the Bureau of Economic Analysis contains a total of $6.5 million for improvements to economic statistics, as supported by the Council of Economic Advisers. The Census budget also contains $1.4 million to provide annual statistics on minority and women owned businesses, $3.8 million to plan for the testing of year 2000 decennial census designs, $5.5 million for a project to improve the Census Bureau's mapping and address list systems with the help of the U.S. Postal Service and $1.0 million for power equipment in the Census Bureau's new computer center.

Improving the overall Department's capacity to respond to priority requirements

General Administration

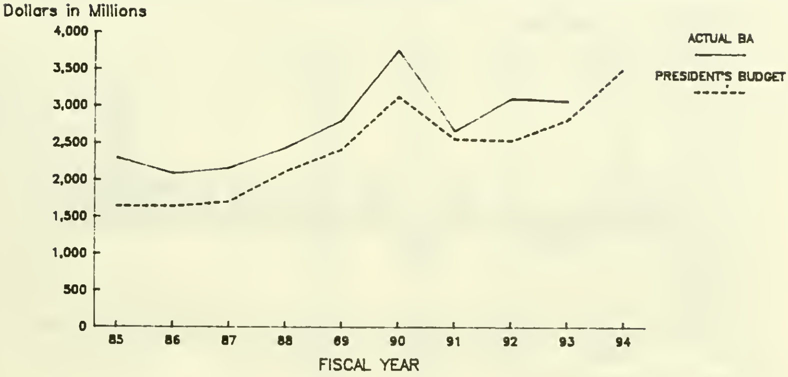
- An increase of $2.4 million is requested for General Administration to improve the financial management system. This increase will provide program managers and policy officials with information to make more timely, accurate and cost effective decisions.
- An increase of $2 million for the Department's Office of the Inspector General will provide resources to conduct audits on Department financial statements required by the Chief Financial Officers Act.
- An increase of $2 million for management enhancement will provide an invigorated capacity to develop, implement, and coordinate policies and initiatives and strengthen program evaluation, performance measurement, grants management, and major systems planning and acquisition.

Improving our capacity to support major growth in patent and trademark needs

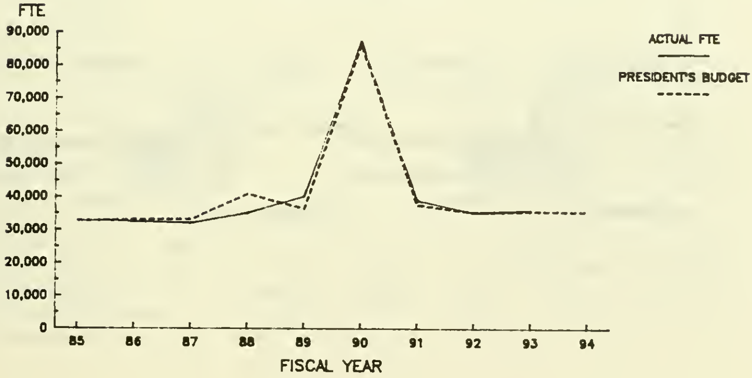
Patent and Trademark Office

- The Patent and Trademark Office is requesting a trademark fee increase above the increase to the Consumer Price Index (CPI) in FY 1994 in order to cover the total costs of trademark operations. There will not be a CPI increase to patent fees in FY 1994. The increase will be absorbed by a reduction in rental rates for space, and savings derived from the President's deficit reduction package.
- The Patent and Trademark Office's FY 1994 program is again proposed to be funded solely by fee income. Increases above the FY 1994 base will enable the PTO to continue deployment and development of the Automated Patent System (APS), meet increased workload demands, and maintain pendency at desired levels.

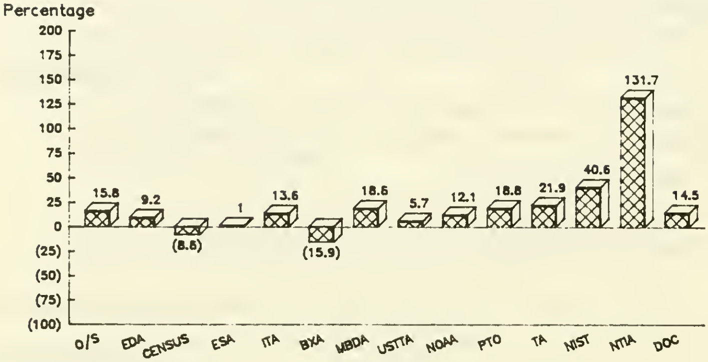
DEPARTMENT OF COMMERCE
Budget Authority
FY 1985 - FY 1994



DEPARTMENT OF COMMERCE
FTE Employment
FY 1985 - FY 1994



DEPARTMENT OF COMMERCE
Change in Appropriations - Percent of Total
1993 vs. 1994



Does not include Trust funds or NTIS

DEPARTMENT OF COMMERCE
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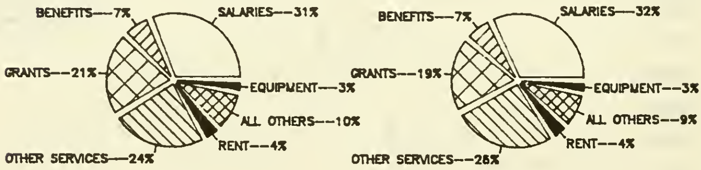

1993

1994

COMPARISON OF 1992, 1993, AND 1994 BUDGET AUTHORITY

(Dollar amounts in thousands)

	1992	1993 Enacted 1/	1994 President's Budget 1993 2/	1994 President's Budget 1994	Change 1993 to 1994
General Administration	$46,420	$47,967	$47,967	$56,423	$8,456
Economic Development Administration	328,982	237,805	331,727	220,301	(111,426)
Bureau of the Census	290,290	297,255	297,255	271,716	(25,539)
Economic and Statistical Analysis	40,380	46,953	46,953	49,802	2,849
International Trade Administration	209,160	213,851	213,851	246,333	32,482
Bureau of Export Administration	39,450	41,015	41,015	34,747	(6,268)
Minority Business Development Agency	42,500	37,889	39,767	45,381	5,614
United States Travel and Tourism Administration	17,480	19,208	19,208	20,298	1,090
National Oceanic and Atmospheric Administration	1,702,548	1,715,790	1,796,563	1,681,084	(115,479)
Patent and Trademark Office	88,441	86,672	86,672	103,000	16,328
Technology Administration	4,600	4,636	4,636	5,425	789
National Technical Information Service	0	7,800	7,800	0	(7,800)
National Institute of Standards and Technology	246,713	382,757	500,160	347,398	(152,762)
National Telecommunications and Information Admin.	39,525	39,747	103,614	40,563	(63,051)
SUBTOTAL, FEDERAL FUNDS	3,096,489	3,179,345	3,537,188	3,122,471	(414,717)
Trust funds	73,023	500	500	508	8
Offsetting receipts	(146,974)	(119,320)	(119,320)	(124,820)	(5,500)
SUBTOTAL, DEPARTMENT OF COMMERCE	3,022,538	3,060,525	3,418,368	2,998,159	(420,209)
INVESTMENTS					
Economic Development Administration:					
Economic development assistance programs				33,000	33,000
National Oceanic and Atmospheric Administration:					
Operations, research, and facilities				228,414	228,414
Construction				14,651	14,651
National Institute of Standards and Technology:					
Scientific and technical research and services				37,160	37,160
Industrial technology services				142,077	142,077
Working Capital Fund				8,563	8,563
National Telecommunications and Information Admin:					
Salaries and expenses				3,000	3,000
Information infrastructure grants				51,000	51,000
SUBTOTAL, INVESTMENTS				517,865	517,865
Proposed for later transmittal:					
National Oceanic and Atmospheric Administration					
Operations, research & facilities, Federal funds				(45,500)	(45,500)
Marine Navigation Trust Fund				45,500	45,500
TOTAL, DEPARTMENT OF COMMERCE	3,022,538	3,060,525	3,418,368	3,516,024	97,656

1/ Includes all transfers implemented through March 1993

2/ Includes economic stimulus supplemental

COMPARISON OF 1992, 1993, AND 1994 OUTLAYS

	1992	1993	1994	Change 1993 to 1994
General Administration	$44,654	$53,653	$57,727	$4,074
Economic Development Administration	124,888	240,094	275,525	35,431
Bureau of the Census	301,884	381,551	271,719	(109,832)
Economic and Statistical Analysis	39,861	54,738	49,750	(4,988)
International Trade Administration	192,456	192,843	232,930	40,087
Bureau of Export Administration	43,321	40,505	35,417	(5,088)
Minority Business Development Agency	39,719	42,639	49,347	6,708
United States Travel and Tourism Administration	21,121	18,606	20,912	2,306
National Oceanic and Atmospheric Administration	1,549,863	1,739,519	1,664,514	(75,005)
Patent and Trademark Office	55,952	143,542	101,737	(41,805)
Technology Administration	3,671	5,443	5,317	(126)
National Technical Information Service	0	24,573	0	(24,573)
National Institute of Standards and Technology	183,208	318,049	320,648	2,599
National Telecommunications and Information Administration	43,937	42,475	77,723	35,248
SUBTOTAL, FEDERAL FUNDS	2,644,735	3,298,230	3,163,266	(134,964)
Trust Funds	68,820	485	508	23
Offsetting receipts	(146,974)	(119,320)	(124,820)	(5,500)
SUBTOTAL, DEPARTMENT OF COMMERCE	2,566,581	3,179,395	3,038,954	(140,441)
INVESTMENTS				
Economic Development Administration:				
Economic development assistance programs			3,300	3,300
National Oceanic and Atmospheric Administration:				
Operations, research, and facilities			132,480	132,480
Construction			2,344	2,344
National Institute of Standards and Technology.				
Scientific and technical research and services			28,985	28,985
Industrial technology services			45,465	45,485
Working Capital Fund			4,281	4,281
National Telecommunications and Information Admin:				
Salaries and expenses			2,400	2,400
Information infrastructure grants			1,020	1,020
SUBTOTAL, INVESTMENTS			220,275	220,275
Proposed for later transmittal:				
National Oceanic and Atmospheric Administration				
Operations, research & facilities, Federal funds			(45,500)	(45,500)
Marine Navigation Trust Fund			45,500	45,500
TOTAL, DEPARTMENT OF COMMERCE	2,566,581	3,178,395	3,259,229	79,834

COMPARISON OF 1992, 1993 AND 1994 TOTAL FULL-TIME EQUIVALENT (WORKYEARS) FINANCED FROM ALL SOURCES OF FUNDS

	1992	1993 Enacted	1994	Change 1993 - 1994
General Administration	1,218	1,250	1,248	(2)
Economic Development Administration	350	351	355	4
Bureau of the Census	7,955	8,704	8,175	(529)
Economic and Statistical Analysis	548	594	565	(29)
International Trade Administration	2,236	2,341	2,388	47
Bureau of Export Administration	443	430	307	(123)
Minority Business Development Agency	190	188	190	2
United States Travel and Tourism Administration	92	94	96	2
National Oceanic and Atmospheric Administration	13,829	13,140	13,148	8
Patent and Trademark Office	4,589	5,035	4,973	(62)
Technology Administration	43	43	43	0
National Technical Information Service	335	346	380	34
National Institute of Standards and Technology	3,047	3,177	3,265	88
National Telecommunications and Information Administration	284	303	318	15
TOTAL, DEPARTMENT OF COMMERCE	35,159	35,996	35,451	(545)

COMPARISON OF 1992, 1993 AND 1994 EMPLOYMENT IN PERMANENT POSITIONS FINANCED FROM ALL SOURCES OF FUNDS

	1992	1993 Enacted	1994	Change 1993 - 1994
General Administration	1,315	1,306	1,306	0
Economic Development Administration	375	375	375	0
Bureau of the Census	5,961	6,304	5,849	(455)
Economic and Statistical Analysis	878	660	624	(36)
International Trade Administration	2,549	2,459	2,459	0
Bureau of Export Administration	492	446	323	(123)
Minority Business Development Agency	216	209	209	0
United States Travel and Tourism Administration	94	94	96	2
National Oceanic and Atmospheric Administration	14,366	13,554	13,656	102
Patent and Trademark Office	5,852	5,291	5,237	(54)
Technology Administration	43	43	43	0
National Technical Information Service	386	347	415	68
National Institute of Standards and Technology	2,920	3,031	3,109	78
National Telecommunications and Information Administration	291	310	316	6
TOTAL, DEPARTMENT OF COMMERCE	35,538	34,429	34,017	(412)

GENERAL ADMINISTRATION

Salaries and expenses provides funding for the Secretary, Deputy Secretary and support staff. Responsibilities involve policy development and implementation affecting U.S. and international activities as well as establishing internal goals and objectives for the operation of the Department. The functions include primary liaison with executive branch, Congressional and private sector groups and acting as the management and administrative control point for the Department.

The Office of Inspector General conducts audits, inspections and investigations to combat mismanagement, fraud, waste and abuse of Departmental resources, and to improve the efficiency and effectiveness of Commerce programs.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$31,280	$31,712	$38,042	$6,330
Inspector General	15,140	15,805	18,381	2,576
TOTAL APPROPRIATION	46,420	47,517	56,423	8,906
Transfer Pursuant to P.L. 102 – 395				
Salaries and expenses	0	450	0	(450)
TOTAL BUDGET AUTHORITY	46,420	47,967	56,423	8,456
PERMANENT POSITIONS				
Appropriation:				
Salaries and expenses	355	340	367	27
Inspector General	214	214	214	0
TOTAL:	569	554	581	27

HIGHLIGHTS OF PROGRAM CHANGES

	Base Permanent Positions	Base Amount	Increase/(Decrease) Permanent Positions	Increase/(Decrease) Amount
General Administration				
Financial Management	20	$2,084	0	$2,350

This requested program increase will replace eight accounting systems to remedy long–standing financial systems deficiencies and related internal control weaknesses.

	Permanent Positions	Amount	Permanent Positions	Amount
Management Enhancement	346	33,042	21	2,000

This increase will invigorate several distinct management, analytical and oversight initiatives enhancing critical decision making areas such as: grants management, program evaluation, performance measurement, major automated systems planning/acquisition, policy evaluation and secretariat activities.

	Permanent Positions	Amount	Permanent Positions	Amount
HCHB Tunnel	52	5,404	0	650

Funds will provide the Department's share of constructing a connecting tunnel between the Herbert C. Hoover Building (HCHB) and the Federal Triangle Building. The tunnel will greatly improve public safety and provide for more efficient handling of large tractor trailer shipments.

	Permanent Positions	Amount	Permanent Positions	Amount
Inspector General				
Financial Audits	130	9,789	0	2,000

Funds will enable the Office of Inspector General to execute its responsibility for audit of financial statements under the Chief Financial Officers Act of 1990.

Comparison of Appropriation by Activity

GENERAL ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount
DIRECT OBLIGATIONS:								
Executive direction of the department	38	$3,987	38	$4,082	43	$4,830	5	$748
Departmental staff services	302	28,175	308	28,960	324	33,212	16	4,252
TOTAL DIRECT OBLIGATIONS:	340	32,162	346	33,042	367	38,042	21	5,000
REIMBURSABLE OBLIGATIONS:	26	44,942	26	46,155	26	46,155	0	0
TOTAL OBLIGATIONS:	366	77,104	372	79,197	393	84,197	21	5,000
FINANCING:								
Offsetting collections from:								
Federal funds	(26)	(44,942)			(26)	(46,155)		
Subtotal, financing	(26)	(44,942)			(26)	(46,155)		
TOTAL BUDGET AUTHORITY:	340	32,162			367	38,042		
Less Transfers Implemented Pursuant to P.L. 102–395		(450)						
TOTAL APPROPRIATION:	340	31,712			367	38,042		

Summary of Changes from 1993 Appropriation

	1994 Estimate			
GENERAL ADMINISTRATION	Detailed		Summary	
Salaries and expenses	Perm Pos	Amount	Perm Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			340	$32,612
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				(450)
Amount Currently Available, 1993			340	32,162
Less Transfers Implemented (P.L. 102–395)				(450)
Appropriation, 1993			340	31,712
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
FTE Reestimate	6			
Subtotal, adjustments			6	0
OTHER CHANGES:				
Continuation of 1993 operating level		$450		
1993 pay raise		206		
Within–grade step increases		252		
Civil Service Retirement System (CSRS)		(46)		
Federal Employees Retirement System (FERS)		84		
Thrift Savings Plan		45		
Federal Insurance Contributions Act (FICA) – OASDI		56		
Health insurance premium		53		
Employees' Compensation Fund		(7)		
Rent payments to GSA		129		
Communications, utilities & misc. charges		40		
Printing and reproduction		43		
Supplies		8		
Equipment		17		
Subtotal, other changes			0	1,330
TOTAL, ADJUSTMENTS TO BASE			6	1,330
1994 base			346	33,042
Program changes			21	5,000
TOTAL REQUIREMENTS			367	38,042
1994 APPROPRIATION			367	38,042

Comparison of Appropriation by Activity

GENERAL ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Office of the Inspector General	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Inspector General	214	$15,805	214	$16,381	214	$18,381	0	$2,000
TOTAL DIRECT OBLIGATIONS	214	15,805	214	16,381	214	18,381	0	2,000
REIMBURSABLE OBLIGATIONS:	0	630	0	647	0	647	0	0
TOTAL OBLIGATIONS	214	16,435	214	17,028	214	19,028	0	2,000
FINANCING:								
Offsetting collections from:								
Federal funds	0	(630)			0	(647)		
Subtotal, financing	0	(630)			0	(647)		
TOTAL BUDGET AUTHORITY:	214	15,805			214	18,381		
TOTAL APPROPRIATION:	214	15,805			214	18,381		

Summary of Changes from 1993 Appropriation

	1994 Estimate			
GENERAL ADMINISTRATION	Detailed		Summary	
Office of the Inspector General	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			214	$16,105
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				(300)
Appropriation, 1993			214	15,805
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Administrative Savings	0	($101)		
FTE reduction	0	(213)		
Subtotal, adjustments			0	(314)
OTHER CHANGES:				
1993 pay raise		117		
Within–grade step increases		188		
Administratively Uncontrollable overtime		66		
Civil Service Retirement System (CSRS)		(63)		
Federal Employees Retirement System (FERS)		125		
Thrift Savings Plan		16		
Federal Insurance Contributions Act (FICA) – OASDI		40		
Health insurance		29		
Employees' Compensation Fund		245		
Rental payments to GSA		51		
Communications, utilities and misc. charges		6		
Printing and reproduction		1		
Other services				
Working Capital Fund		64		
Supplies and materials		2		
Equipment		1		
Subtotal, other changes			0	890
TOTAL ADJUSTMENTS TO BASE			0	576
1994 base			214	16,381
Program changes			0	2,000
TOTAL REQUIREMENTS			214	16,381
1994 APPROPRIATION			214	16,381

ECONOMIC DEVELOPMENT ADMINISTRATION

The Economic Development Administration (EDA) provides grants for public works and development facilities, planning and coordination and other financial assistance that will help reduce substantial and persistent unemployment in economically distressed areas. In 1994, EDA will continue to encourage patterns of development that maximize the utilization of the Nation's manpower and capital, protect the environment, and alleviate the adverse impact caused by technological changes, structural decline, economic dislocation, and natural disasters. EDA objectives are accomplished through several programs:

Planning grants encourage and support local development organizations with the mission of empowering states and communities to design and implement effective economic development policies and programs.

Technical assistance grants provide for local feasibility and industry studies, natural resource development and export promotion. At the national level, grants provide for studies of topical issues such as technology transfer and business financing. In addition, EDA provides funding for a network of University Centers that offer technical assistance to clients outside the sponsoring institution.

Development grants provide for infrastructure projects that foster the establishment or expansion of industrial and commercial businesses providing long–term employment to the unemployed or underemployed residents of communities experiencing high unemployment, low per–capita income, and outmigration.

Economic adjustment grants provide a package of assistance tools to help communities counteract either a gradual erosion or sudden dislocation of their local economic structure.

Research, evaluation and demonstration funds are used to support studies of national and regional economic and industrial trends that will increase knowledge about the causes of economic distress and approaches to alleviating such problems.

The Trade Adjustment Assistance Program, which provides technical assistance to firms injured by imports, is proposed for termination in FY 1994. The Department of Commerce will continue to provide assistance to affected firms through existing Commerce programs such as EDA's University Centers, the NIST Manufacturing Technology Centers and MBDA's Minority Business Development Centers.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$27,632	$27,118	$30,151	$3,033
Economic development assistance programs (EDAP)	301,836	217,000	223,150	6,150
Economic development guaranteed loans	2,414	0	0	0
Economic development revolving fund (rescission of unobligated balance)	(3,000)	0	0	0
TOTAL APPROPRIATION	328,882	244,118	253,301	9,183
Reappropriation (EDAP)	100	0	0	0
Transfers Pursuant to P.L. 103–395				
Salaries and Expenses	0	(1,356)	0	0
EDAP	0	(4,957)	0	0
TOTAL BUDGET AUTHORITY:	328,982	237,805	253,301	15,496
Pending Supplemental		93,922		

PERMANENT POSITIONS

Appropriation:	1992	1993	1994 Estimate	Increase (Decrease)
Salaries and expenses	357	375	375	0
Economic development guaranteed loans	18	0	0	0
TOTAL:	375	375	375	0

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Salaries and expenses	375	$27,151	0	$3,000

Funds are requested to strengthen grants administration, increase budget, program and management analysis, and expand the focus on defense economic conversion (0 pos.; +$1,250). Enhance management information systems which have not had a major upgrade since the late 1970's (0 pos.; +$1,750). It is estimated that the conversion will result in cost savings in grants administration of over $500 thousand.

Economic development assistance programs	0	203,870	0	19,280

The Administration proposes to terminate the Trade Adjustment Assistance Centers in FY 1994 (0 pos.; −$13,720). Continued assistance to impacted firms will be available through other Commerce programs such as EDA's University Center Program, MBDA's Minority Business Development Centers, NIST's Manufacturing Technology Center Program and ITA's district offices.

A direct appropriation for EDA is requested to allow EDA to support the economic diversification of communities injured by defense reductions (0 pos.; +$33,000). Grants will be awarded to assist communities begin planning following the announcement of procurement cutbacks, closing of Department of Energy defense related labs, or completion of the Base Closure Commission's decisions, and to implement base reuse plans. The investment request is contigent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Comparison of Appropriation by Activity

ECONOMIC DEVELOPMENT ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Economic development assistance programs:								
Executive direction	22	$1,488	22	$1,593	22	$1,593	0	0
Program operations	74	4,377	74	4,632	74	4,632	0	0
Program support	65	7,009	65	7,062	65	10,062	0	$3,000
Regional operations	214	12,888	214	13,864	214	13,864	0	0
TOTAL DIRECT OBLIGATIONS:	375	25,762	375	27,151	375	30,151	0	3,000
REIMBURSABLE OBLIGATIONS:	0	2,652	0	1,650	0	1,650	0	0
TOTAL OBLIGATIONS:	375	28,414	375	28,801	375	31,801	0	3,000
Financing:								
Offsetting collections from:								
Federal funds	0	(2,652)			0	(1,650)		
Subtotal, financing	0	(2,652)			0	(1,650)		
TOTAL BUDGET AUTHORITY:	375	25,762			375	30,151		
Less Transfer Pursuant to P.L. 102-395	0	1,356						
TOTAL APPROPRIATION:	375	27,118			375	30,151		

Summary of Changes from 1993 Appropriation

ECONOMIC DEVELOPMENT	1994 Estimate			
ADMINISTRATION	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Budget Authority as shown in 1994 President's Budget, 1993			375	$25,762
Transfers Pursuant to P.L. 102–395			0	1,356
Appropriation currently available, 1993			375	27,118
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Grant Administration Savings		($516)		
Subtotal, adjustments			0	(516)
OTHER CHANGES:				
Additional amount in FY 1994 to provide full–year cost of 1993 pay increase		192		
Within–grade step increases		135		
Civil Service Retirement System (CSRS)		(14)		
Federal Employees Retirement System (FERS)		25		
Thrift Savings Plan		4		
Federal Insurance Contributions Act (FICA) – OASDI		19		
Health insurance premium		63		
Employees' Compensation Fund		36		
Travel:				
Per Diem		10		
Rental payments to GSA		73		
Communications, utilities & misc. charges:				
Other telephone		18		
Printing and reproduction		2		
Other services				
Working Capital Fund		(17)		
Supplies and materials		3		
Subtotal, other cost changes			0	549
TOTAL, ADJUSTMENTS TO BASE			0	33
1994 base			375	27,151
Program changes			0	3,000
TOTAL REQUIREMENTS			375	30,151
1994 APPROPRIATION:			375	30,151

Comparison of Appropriation by Activity

ECONOMIC DEVELOPMENT ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Economic development assistance programs	Perm. Pos	Amount	Perm Pos	Amount	Perm Pos	Amount	Perm Pos	Amount
DIRECT OBLIGATIONS:								
Public Works	0	$154,384	0	$135,385	0	$135,385	0	0
Planning assistance:								
Districts	0	17,353	0	17,353	0	17,353	0	0
Indians	0	2,901	0	2,901	0	2,901	0	0
States	0	1,933	0	1,933	0	1,933	0	0
Urban	0	2,583	0	2,583		2,583	0	0
Subtotal	0	24,770	0	24,770	0	24,770	0	0
Defense Economic Investment	0	0	0	0	0	33,000	0	$33,000
Technical assistance grants	0	9,000	0	10,420	0	10,420	0	0
Economic adjustment grants	0	94,575	0	20,575	0	20,575	0	0
Trade adjustment assistance grants	0	13,720	0	13,720	0	0	0	(13,720)
Research and evaluation	0	0	0	500	0	500	0	0
TOTAL DIRECT OBLIGATIONS	0	296,449	0	205,370	0	224,650	0	19,280
REIMBURSABLE OBLIGATIONS	0	128,597		500		500		0
TOTAL OBLIGATIONS	0	425,046	0	205,870	0	225,150	0	19,280
FINANCING:								
Offsetting Collections from:								
Federal Funds	0	(80,500)	0	(500)	0	(500)		
Unobligated balance, start of year	0	(135,982)	0	(3,479)		(3,479)		
Unobligated balance, end of year	0	3,479	0	1,979	0	1,979		
Subtotal, financing	0	(213,003)	0	(2,000)	0	(2,000)		
TOTAL BUDGET AUTHORITY:	0	212,043	0	203,870	0	223,150		
Plus Transfers Pursuant to P.L. 102-395	0	4,957	0	0	0	0		
TOTAL APPROPRIATION:	0	217,000	0	203,870	0	223,150		

Summary of Changes from 1993 Appropriation

ECONOMIC DEVELOPMENT	1994 Estimate			
ADMINISTRATION	Detailed		Summary	
Economic development assistance programs	Perm Pos	Amount	Perm Pos	Amount
Budget Authority available as shown in 1994 President's Budget, 1993			0	$206,150
Proposed Transfers Not Approved Pursuant to P.L. 102-395			0	5,893
Budget Authority Currently Available, 1993			0	212,043
Transfers Approved Pursuant to P.L. 102-395				4,957
Appropriation, 1993			0	217,000
ADJUSTMENTS TO BASE:				
OTHER CHANGES:				
Continuation of Adjustment to FY 1993 operating level				(13,130)
TOTAL ADJUSTMENTS TO BASE			0	(13,130)
1994 base			0	203,870
1994 Savings – Trade Adjustment Assistance Program Reduction			0	(13,720)
1994 Investment Program			0	33,000
TOTAL REQUIREMENTS			0	223,150
1994 APPROPRIATION:			0	223,150

BUREAU OF THE CENSUS

The Bureau of the Census collects, compiles and publishes a broad range of current and periodic statistics including economic, social and demographic data on population, housing, agriculture, governments, foreign trade, manufacturing, construction, mineral industries, and retail, wholesale, and service trades.

The Salaries and Expenses appropriation provides for monthly, quarterly and annual surveys, and other programs which require a constant annual funding level.

The Periodic Censuses and Programs appropriation provides for decennial and quinquennial censuses, and other programs which are cyclical in nature. Additionally, individual surveys are conducted for other Federal agencies on a reimbursable basis.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase/ (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$125,290	$123,955	$140,798	$16,843
Periodic censuses and programs	165,000	173,300	130,918	(42,382)
TOTAL APPROPRIATION	290,290	297,255	271,716	(25,539)
Transfers:				
Salaries and expenses	0	3,405	0	(3,405)
Periodic censuses and programs	0	(3,405)	0	3,405
TOTAL BUDGET AUTHORITY	290,290	297,255	271,716	(25,539)

PERMANENT POSITIONS

	1992	1993	1994 Estimate	Increase/ (Decrease)
Salaries and expenses	2,066	2,041	2,361	320
Periodic censuses and programs	2,149	2,655	1,880	(775)
TOTAL:	4,215	4,696	4,241	(455)

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Salaries and Expenses				
Current Economic Statistics	1,469	$82,089	109	$5,058

FY 1994 increases support the Economic Statistics Initiative. The components will expand and improve service statistics (+45 pos.; +$2,171) and construction statistics (+32 pos.; +$1,300). In addition to the $5,058 in proposed increases, adjustments to base also include funds for components of the Economic Statistics Initiative approved in FY 1992: improved service sector statistics (+32 pos; +$1,577) and Standard Industrial Code (SIC) research (+2 pos.; +$100). These initiatives will provide annual statistics on minority and women owned businesses and are designed to augment the data currently collected every five years as a part of the Economic Censuses (+17 pos; +$1,377). These requests will also consolidate funding for the Federal Audit Clearinghouse, operated by the Census Bureau as the Executive Agent for OMB. The clearinghouse provides for the collection, review and analysis of audit reports of local governments and nonprofit organizations (+20 pos; +$600). Decreases will reduce the frequency of Census reports relating to cotton and soybean, and sunflower oilseeds from monthly to quarterly (−5 pos.; −$390).

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Periodic Censuses and Programs				
Year 2000 decennial census	317	$19,288	53	$3,834

Support the design and development of the automated systems required to conduct the test decennial census operation, including data collection systems (+20 pos.; +$1,382). The decision date for selecting the design alternatives for the 1995 test census requires that all of these activities be accomplished on a very compressed time schedule. FY 1994 is the first year of the cycle for operational preparation for the 2000 decennial census. Support preparatory work which must be accomplished regardless of the design selected (+33 pos.; +$2,452). These preparatory activities are independent of the research and development program. Starting this work in FY 1994 is essential to the decisions required on the procurement of automation hardware and for the development of supporting software.

Geographic support	286	17,962	95	6,000

This program increase will allow for the management of, in an automated format, a continuously updated and increasingly accurate map base that includes the correct mailing address and geographic location of housing units, group quarters, farms, businesses, and industrial establishment. This computer file will provide address lists to serve as the coverage control and sampling frame for approved statistical activities. The Bureau will build partnerships with the United States Postal Service, state and local governments, and other agencies and organizations that share its concern for having current and correct geographic and address information (+85 pos.; +$5,500). This initiative will also collect boundary and annexation information not collected in FY 1993 due to budget reductions. (+10 pos.; +$500)

Data Processing Systems	0	8,003	0	1,000

This request will provide uninterruptible power supplies, emergency generators and power distribution units necessary to operate the new computer facility in Bowie, Md.

Comparison of Appropriation by Activity

BUREAU OF THE CENSUS	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Current surveys and statistics:								
Current economic statistics	1,342	$77,301	1,469	$82,089	1,578	$87,147	109	$5,058
Current demographic statistics	645	46,864	729	50,337	729	50,337	0	0
Survey development and data services	54	3,195	54	3,314	54	3,314	0	0
TOTAL DIRECT OBLIGATIONS:	2,041	127,360	2,252	135,740	2,361	140,798	109	5,058
REIMBURSABLE OBLIGATIONS:	1,608	160,000	1,608	144,000	1,608	144,000	0	0
TOTAL OBLIGATIONS:	3,649	287,360	3,860	279,740	3,969	284,798	109	5,058
FINANCING:								
Offsetting collections from:								
Federal funds	(1,478)	(150,000)			(1,478)	(134,000)		
Non-Federal sources	(130)	(10,000)			(130)	(10,000)		
Subtotal, financing	(1,608)	(160,000)			(1,608)	(144,000)		
TOTAL BUDGET AUTHORITY:	2,041	127,360			2,361	140,798		
Less Transfers Implemented Pursuant to P.L. 102-395		(3,405)				0		
TOTAL APPROPRIATION:	2,041	123,955			2,361	140,798		

Summary of Changes from 1993 Appropriation

BUREAU OF THE CENSUS	1994 Estimate			
	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount Currently Available, 1993			2,041	$127,360
Less Transfers Implemented (P.L. 102–395)				(3,405)
Appropriation, 1993			2,041	123,955
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Personnel Savings		($1,541)		
Administrative Savings		(793)		
Subtotal, adjustments			0	(2,334)
OTHER CHANGES:				
Continuation of FY 1993 operating level		3,405		
Full Year cost of FY 1993 pay raise in FY 1994		886		
Within-grade step increases		970		
Civil Service Retirement System (CSRS)		(25)		
Federal Employees Retirement System (FERS)		45		
Thrift Savings Plan		306		
Federal Insurance Contributions Act (FICA) – OASDI		5		
Health insurance premium		303		
Employees' Compensation Fund		24		
Travel:		78		
Rent payments to GSA		291		
Printing and reproduction		92		
Other services:				
Working Capital Fund		238		
Supplies and materials		47		
Survey of Income and Program Participation	25	1,849		
Restoration of 1993 base reduction	152	3,928		
1994 Increment for 1992 Services and SIC Research Increases (Economic Statistics Initiative)	34	1,677		
Subtotal, other changes			211	14,119
TOTAL, ADJUSTMENTS TO BASE			211	11,785
1994 base			2,252	135,740
Program changes			109	5,058
1994 APPROPRIATION			2,361	140,798

Comparison of Appropriation by Activity

BUREAU OF THE CENSUS	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Periodic censuses and programs	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Economic statistics programs:								
Economic censuses	563	$48,608	520	$37,494	520	$37,494	0	0
Census of governments	69	2,930	37	2,892	37	2,892	0	0
Census of agriculture	745	30,064	336	19,972	336	19,972	0	0
Subtotal	1,377	81,602	893	60,358	893	60,358	0	0
Demographic statistics programs:								
Intercensal demographic estimates	48	3,855	51	5,425	51	5,425	0	0
Decennial census	722	55,395	0	0	0	0	0	0
Year 2000 Decennial census	161	13,750	317	19,288	370	23,122	53	$3,834
Subtotal	931	73,000	368	24,713	421	28,547	53	3,834
Sample redesign	147	11,539	185	13,048	185	13,048	0	0
Geographic support	200	13,161	286	17,962	381	23,962	95	6,000
Data processing systems		6,293		8,003		9,003	0	1,000
TOTAL DIRECT OBLIGATIONS	2,655	185,595	1,732	124,084	1,880	134,918	148	10,834
FINANCING:								
Unobligated balance, start of year		(9,845)						
Recovery of prior year obligations		(5,855)				(4,000)		
Subtotal, financing	0	(15,700)			0	(4,000)		
TOTAL BUDGET AUTHORITY:	2,655	169,895			1,880	130,918		
Plus Transfers Implemented Pursuant to P.L. 102–395		3,405						
TOTAL APPROPRIATION:	2,655	173,300			1,880	130,918		

Summary of Changes from 1993 Appropriation

BUREAU OF THE CENSUS	1994 Estimate			
	Detailed		Summary	
Periodic censuses and programs	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			2,655	$169,895
Plus Transfers Implemented (P.L. 102–395)				3,405
Appropriation, 1993			2,655	173,300
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Planned cyclical changes in periodic changes	(923)	($36,717)		
Administrative savings		(2,947)		
FTE Reduction		(1,812)		
Subtotal, adjustments			(923)	(41,476)
OTHER CHANGES:				
1993 Pay raise		597		
Thrift Savings Plan		176		
Employees' Compensation Fund		(852)		
Travel		(853)		
Adjustment to cyclic requirements		2,192		
Funding shift for ADP requirements		(9,000)		
Subtotal, other changes			0	(7,740)
TOTAL, ADJUSTMENTS TO BASE			(923)	(49,216)
1994 base			1,732	124,084
Program changes			148	10,834
TOTAL REQUIREMENTS			1,880	134,918
FINANCING:				
Recovery of prior year obligations			0	(4,000)
1994 APPROPRIATION			1,880	130,918

ECONOMICS AND STATISTICS ADMINISTRATION

ECONOMIC & STATISTICAL ANALYSIS

Economic and Statistical Analysis provides a spectrum of economic statistics that describe the position of the U.S. economy. The provision of economic information and analyses is accomplished through two program activities.

The Bureau of Economic Analysis prepares and interprets the economic accounts of the United States. These accounts consist of the national income and product accounts, summarized by the gross domestic product (GDP); the wealth accounts, which show the business and other components of national wealth; the input–output accounts, which trace interrelationships among industrial markets; regional economic accounts; and the U.S. balance of payments and associated foreign investment accounts. This work is supplemented by a system of business indicators.

Policy Support provides information and analyses on the state of the economy and matters relating to economic policy, supports the Under Secretary for Economic Affairs with statistical coordination, and conducts analyses of the cross–industry effects of economic developments.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$40,380	$39,353	$49,802	$10,449
TOTAL APPROPRIATION	40,380	39,353	49,802	10,449
Transfers:				
Pursuant to P.L. 102–395	0	7,600	0	(7,600)
Total Budget Authority	40,380	46,953	49,802	2,849
PERMANENT POSITIONS				
Salaries and expenses	604	601	566	(35)

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Economic Analysis	498	$41,232	12	$3,000

An increase of $3.0 million is requested to support the Economic Statistics Initiative. This initiative will: improve the quality of the GDP estimates, modernize the U.S national economic accounts and increase their international comparability (+7 pos.; +$1,200); upgrade the international accounts to better track increasingly complex and interrelated international markets for goods, services, and capital (+5 pos.; +$1,000); and, develop and acquire new and improved source data (0 pos.; +$800) as supported by the current and past Chairs of the Council of Economic Advisors.

Comparison of Appropriation by Activity

ECONOMIC & STATISTICAL ANALYSIS	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos	Amount	Perm Pos	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Economic analysis:								
National economic accounts	208	$15,375	189	$16,632	196	$17,832	7	$1,200
International economic eccounts	205	12,737	184	14,015	189	15,015	5	1,000
Regional economic accounts	82	5,019	77	5,547	77	5,547	0	0
Analysis of economic trends	33	3,342	32	3,538	32	3,538	0	0
Develop end acquire source data	0	236	0	0	0	800	0	800
BEA relocation	0	5,000	0	1,500	0	1,500	0	0
Subtotal	528	41,709	482	41,232	494	44,232	12	3,000
Policy support:	73	5,480	72	5,570	72	5,570	0	0
TOTAL DIRECT OBLIGATIONS:	601	47,189	554	46,802	566	49,802	12	3,000
REIMBURSABLE OBLIGATIONS:	59	2,655	58	2,681	58	2,681	0	0
TOTAL OBLIGATIONS:	660	49,844	612	49,483	624	52,483	12	3,000
FINANCING:								
Offsetting collections from.								
Federal funds	(52)	(1,520)			(51)	(1,546)		
Non-Federal sources	(7)	(1,135)			(7)	(1,135)		
Unobligated balance, start of year:		(236)						
Subtotal, financing	(59)	(2,891)			(58)	(2,681)		
TOTAL BUDGET AUTHORITY:	601	46,953			566	49,802		
Less Transfers Implemented Pursuant to P.L. 102-395	(37)	(7,600)			0	0		
TOTAL APPROPRIATION:	564	39,353			566	49,802		

Summary of Changes from 1993 Appropriation

ECONOMIC & STATISTICAL ANALYSIS	1994 Estimate			
	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			601	$49,330
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				(2,377)
Amount Currently Available, 1993			601	46,953
Less Transfers Implemented (P.L. 102–395)			0	(7,600)
Appropriation, 1993			601	39,353
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Administrative Savings		($204)		
FTE Reduction	(8)	(594)		
FY 1994 Costs of BEA Relocation		1,500		
Reestimate of FTE and positions	(37)	0		
Subtotal, Adjustments			(45)	702
TRANSFERS:				
To "Working Capital Fund," Office of Secretary	(2)	0		
Subtotal, transfers			(2)	0
OTHER CHANGES:				
Continue FY 1993 operating level		2,600		
Additional amount in FY 1994 to provide full year cost of FY 1993 pay raise		216		
Within-grade step increases		438		
Civil Service Retirement System (CSRS)		(117)		
Federal Employees Retirement System (FERS)		216		
Thrift Savings Plan		34		
Federal Insurance Contributions Act (FICA) – OASDI		119		
Health insurance premium		58		
Employees' Compensation Fund		15		
Travel and transportation of persons		3		
Rental payments to GSA		3,356		
Communications, utilities and miscellaneous charges		(40)		
Printing and reproduction		15		
Other services:				
Working Capital Fund		(189)		
Contracts		11		
Supplies and materials		12		
Subtotal, other changes			0	6,747
TOTAL, ADJUSTMENTS TO BASE			(47)	7,449
1994 base			554	46,802
Program changes			12	3,000
1994 APPROPRIATION			566	49,802

INTERNATIONAL TRADE ADMINISTRATION

The International Trade Administration (ITA) strives to increase the competitiveness of U.S. business in the world economy by promoting U.S. exports, fighting unfair foreign trade barriers, and negotiating and implementing both multilateral and bilateral trade agreements. ITA objectives are accomplished through the following four program units:

Trade Development (TD) assesses the competitiveness of U.S. industries, conducts analyses on international trade and investment, conducts export promotion programs and carries out the Market Development Cooperator Program directed toward specific industrial sectors. TD also provides support for the Trade Promotion Coordinating Committee.

International Economic Policy (IEP) assists in formulation of U.S. bilateral and multilateral trade policies, monitors the implementation of trade agreements, and provides counseling and assistance to U.S. businesses seeking to trade with specific countries or region.

Import Administration (IA) protects American firms from unfair trade practices by administering U.S. antidumping and countervailing duty laws, bilateral steel trade agreements, the U.S.–Canada Softwood Lumber Agreement, and the U.S.–Japan Semiconductor agreement.

The United States and Foreign Commercial Service (US&FCS) provides export counseling and export promotion services to U.S. firms through a network of offices in 45 states and 68 foreign countries. The US&FCS develops and distributes information products and conducts trade shows and trade fairs overseas.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Operations & administration	$209,160	$213,851	$246,333	$32,482
TOTAL APPROPRIATION	209,160	213,851	246,333	32,482
PERMANENT POSITIONS				
Appropriation:				
Operations & administration	2,521	2,431	2,431	0

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Trade development	461	$49,762	0	$1,749

Resources are provided to fund an additional three Consortia of American Business in the Newly Independent States (CABNIS) grants. In FY 1993, four initial CABNIS grants were awarded using the Agency for International Development (A.I.D.) funds (0 pos.; +$1,749).

	Permanent Positions	Amount	Permanent Positions	Amount
International economic policy	242	18,483	0	6,400

In FY 1993, IEP will continue the Special American Business Intern Training (SABIT) program. The SABIT Program provides U.S. businessmen and scientists the opportunity to share their experience with Russian companies and Russian businessmen and scientists to gain hands-on experience in free market economics while interning in U.S. companies (0 pos.; +$4,200). Resources are also requested to provide support for the U.S.-Russian Business Development Committee which will address obstacles to trade in the NIS (0 pos.; +$1,500). IEP will also continue to operate the NIS Business Information Service (BISNIS) center which was established in FY 1993 using A.I.D. resources (0 pos.; +$700).

U.S. and Foreign Commercial Service (US&FCS)	1,391	$130,123	0	$10,475

An increase is requested to enable the US&FCS to restore lost overseas purchasing power due to the decreasing value of the dollar, increasing overseas inflation and increasing overseas wages (0 pos.; +$10,475). These variables were consistently higher than the FY 1989 through FY 1992 adjustment to base for overseas wage and prices.

Comparison of Appropriation by Activity

INTERNATIONAL TRADE ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Operations and Administration	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Trade development	461	$55,208	461	$49,762	461	$51,511	0	$1,749
International economic policy	242	18,868	242	18,483	242	24,883	0	6,400
Import administration	337	30,683	337	29,341	337	29,341	0	0
U.S. & Foreign Commercial Service	1,391	114,633	1,391	130,123	1,391	140,598	0	10,475
TOTAL DIRECT OBLIGATIONS:	2,431	219,392	2,431	227,709	2,431	246,333	0	18,624
REIMBURSABLE OBLIGATIONS:	28	33,100	28	24,200	28	24,200	0	0
TOTAL OBLIGATIONS:	2,459	252,492	2,459	251,909	2,459	270,533	0	18,624
FINANCING:								
Unobligated balance, start of year:		(5,541)						
Offsetting collections from:								
Federal funds		(10,493)				(7,744)		
Non-Federal sources	(28)	(22,607)			(28)	(16,456)		
Subtotal, financing	(28)	(38,641)			(28)	(24,200)		
TOTAL BUDGET AUTHORITY:	2,431	213,851			2,431	246,333		
TOTAL APPROPRIATION:	2,431	213,851			2,431	246,333		

Summary of Changes from 1993 Appropriation

	1994 Estimate			
INTERNATIONAL TRADE ADMINISTRATION	Detailed		Summary	
Operations and Administration	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available for FY 1993 as shown in the 1994 President's Budget			2,431	$216,851
Transfers Proposed Pursuant to P.L. 102–395			0	(3,000)
Appropriation currently available, 1993			2,431	213,851
ADJUSTMENTS TO BASE:				
ADJUSTMENTS				
New Materials Center		($2,850)		
Grant to Textile Clothing Technology Corporation		(3,149)		
Subtotal, adjustmentss			0	(5,999)
OTHER CHANGES:				
Additional amount in FY 1994 to provide full–year cost of 1993 pay raise		929		
Full year cost in 1994 of positions financed for part year in 1993		2,295		
Within–grade step increases		1,034		
Civil Service Retirement System (CSRS)		(222)		
Federal Employees Retirement System (FERS)		414		
Thrift Savings Plan		63		
Federal Insurance Contributions Act (FICA) – OASDI		219		
Health insurance premium		245		
Employees' Compensation Fund		122		
Travel:				
Per Diem		29		
Rent payments to GSA		352		
Communications, utilities & misc. charges		113		
Printing and reproduction		97		
Other services:				
Working Capital Fund		1,016		
Supplies and materials		78		
Foreign Service Nationals wage increases		2,427		
Overseas price increases		2,677		
Foreign Affairs Administrative Services		7,969		
Subtotal, other changes			0	19,857
TOTAL, ADJUSTMENTS TO BASE			0	13,858
1994 base			2,431	227,709
Program changes			0	18,624
TOTAL REQUIREMENTS			2,431	246,333
1994 APPROPRIATION:			2,431	246,333

BUREAU OF EXPORT ADMINISTRATION

The Bureau of Export Administration (BXA) enforces U.S. export controls relating to national security, foreign policy, and short supply. Drawing its authority from the Export Administration Act of 1979 as amended, BXA strives to balance economic and national security interests through several programs.

Management and Policy Coordination develops, analyzes, and coordinates policy initiatives within BXA.

Export Administration determines: 1) whether to approve or deny export licenses for controlled goods and technology; 2) the technical parameters of controlled goods and technology; and, 3) the foreign availability of controlled goods and technology. It also drafts regulations and represents BXA in interagency and international forums relating to export controls.

Export Enforcement detects and prevents the illegal export of controlled goods and technology in violation of U.S. export control laws.

Industrial Resource Administration ensures the availability of industrial resources for national defense under the authority of the Defense Production Act.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase/ (Decrease)
FEDERAL FUNDS				
Appropriation:				
Operations & administration	$39,450	$41,015	$34,747	($6,268)
TOTAL APPROPRIATION	39,450	41,015	34,747	(6,268)
PERMANENT POSITIONS				
Appropriation:				
Operations & administration	488	442	319	(123)

HIGHLIGHTS OF PROGRAM CHANGES

A reduction of staff and resources (−116 pos.; − $6,459) is made possible by the recent decrease in workload. Emphasis will be placed on increasing efforts to conclude bilateral and multilateral agreements to control technology exports to unstable countries. The reductions will be distributed across the four programs as follows:

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Management & policy coordination	19	$1,656	(4)	($174)
Export administration	239	20,882	(75)	(4,216)
Export enforcement	155	16,026	(28)	(1,516)
Industrial resource administration	29	2,642	(9)	(553)

Comparison of Appropriation by Activity

BUREAU OF EXPORT ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Operations and Administration	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Management and policy coordination	19	$1,706	19	$1,656	15	$1,482	(4)	($174)
Export administration	239	21,520	235	20,882	160	16,666	(75)	(4,216)
Export enforcement	155	16,457	153	16,026	125	14,510	(28)	(1,516)
Industrial resource administration	29	2,719	28	2,642	19	2,089	(9)	(553)
TOTAL DIRECT OBLIGATIONS:	442	42,402	435	41,206	319	34,747	(116)	(6,459)
REIMBURSABLE OBLIGATIONS:	4	700	4	700	4	700	0	0
TOTAL OBLIGATIONS:	446	43,102	439	41,906	323	35,447	(116)	(6,459)
FINANCING:								
Offsetting collections from:								
Federal funds	0	(85)			0	(85)		
Non−Federal sources	(4)	(615)			(4)	(615)		
Unobligated balance, start of year:	0	(1,387)			0	0		
Subtotal, financing	(4)	(2,087)			(4)	(700)		
TOTAL BUDGET AUTHORITY:	442	41,015			319	34,747		
TOTAL APPROPRIATION:	442	41,015			319	34,747		

Summary of Changes from 1993 Appropriation

	1994 Estimate			
BUREAU OF EXPORT ADMINISTRATION	Detailed		Summary	
Operations and Administration	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			442	$41,015
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
FTE Reduction	(7)	($441)		
Administrative Savings		(401)		
Subtotal, adjustments			(7)	(842)
OTHER CHANGES:				
1993 Pay raise		$219		
Full year cost in 1994 of positions financed for part year in 1993		0		
Within-grade step increases		323		
Civil Service Retirement System (CSRS)		22		
Federal Employees Retirement System (FERS)		(49)		
Thrift Savings Plan		(6)		
Federal Insurance Contributions Act (FICA) – OASDI		(16)		
Health insurance premium		107		
Employees' Compensation Fund		(2)		
Transportation of things		84		
Rent payments to GSA		133		
Communications, utilities & misc. charges:		35		
Printing and reproduction		9		
Working Capital Fund		169		
Supplies and materials		5		
Subtotal, other changes			0	1,033
TOTAL, ADJUSTMENTS TO BASE			(7)	191
1994 base			435	41,206
Program changes			(116)	(6,459)
TOTAL REQUIREMENTS			319	34,747
1994 APPROPRIATION			319	34,747

MINORITY BUSINESS DEVELOPMENT AGENCY

The Minority Business Development Agency (MBDA) coordinates Federal efforts to develop and strengthen new and existing minority businesses. On a cost-sharing basis, MBDA-funded Minority Business Development Centers (MBDCs) provide management and technical assistance to minority entrepreneurs. MBDA also conducts resource development, advocacy, research and information programs.

To meet the growing needs of minority businesses in FY 1994, the Administration proposes to strengthen MBDA's Enterprise Development programs through the expansion of the Minority Enterprise Growth Assistance Center initiative into other regions. These centers will provide minority businesses a broader array of services than the traditional BDC including: franchising, capital development, international trade, construction management, and computer training.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase/ (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Minority business development	$42,500	$37,889	$45,381	$7,492
TOTAL APPROPRIATION	42,500	37,889	45,381	7,492
Pending Supplemental		1,878		
PERMANENT POSITIONS				
Appropriation:				
Minority business development	216	209	209	0

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Enterprise Development	148	$34,618	0	$5,000

The requested increase will fund up to three additional MEGA Centers in FY 1994 (0 pos.; +$5,000). MEGA Centers will enhance the level of management and technical assistance to minority business entrepreneurs by better coordinating its services with other providers such as the SBA, expanding marketing and outreach, and utilizing state–of–the–art computer technology and databases.

Comparison of Appropriation by Activity

MINORITY BUSINESS DEVELOPMENT AGENCY	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Minority business development	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Enterprise development	148	$36,885	148	$34,618	148	$39,618	0	$5,000
Resource development	27	3,611	27	3,164	27	3,164	0	0
Advocacy, research and information	34	3,060	34	2,599	34	2,599	0	0
TOTAL DIRECT OBLIGATIONS:	209	43,556	209	40,381	209	45,381	0	5,000
REIMBURSABLE OBLIGATIONS:	0	600	0	600	0	616	0	16
TOTAL OBLIGATIONS:	209	44,156	209	40,981	209	45,997	0	5,016
FINANCING:								
Offsetting collections from:								
Federal funds		(600)				(616)		
Non–Federal sources		0				0		
Unobligated balance, start of year:		(5,667)				0		
Subtotal, financing	0	(6,267)			0	(616)		
TOTAL BUDGET AUTHORITY:	209	37,889			209	45,381		
TOTAL APPROPRIATION:	209	37,889			209	45,381		

Summary of Changes from 1993 Appropriation

MINORITY BUSINESS DEVELOPMENT AGENCY

	1994 Estimate			
	Detailed		Summary	
Minority business development	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			209	$38,268
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				(379)
Appropriation currently available, 1993			209	37,889
ADJUSTMENTS TO BASE:				
OTHER CHANGES:				
1993 Pay raise		$105		
Full year cost in 1994 of positions financed for part year in 1993		0		
Within–grade step increases		72		
Civil Service Retirement System (CSRS)		(25)		
Federal Employees Retirement System (FERS)		45		
Thrift Savings Plan		7		
Federal Insurance Contributions Act (FICA) – OASDI		21		
Health Insurance Premium		44		
Employees' Compensation Fund		59		
Travel		8		
Rent payments to GSA		122		
Communications, utilities & misc. charges:		11		
Printing and reproduction		5		
Working Capital Fund		16		
Supplies and materials		2		
Maintain FY 1993 Operating Level		2,000		
Subtotal, other changes			0	2,492
TOTAL, ADJUSTMENTS TO BASE			0	2,492
1994 base			209	40,381
Program changes			0	5,000
TOTAL REQUIREMENTS			209	45,381
1994 APPROPRIATION			209	45,381

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION

The United States Travel and Tourism Administration (USTTA) coordinates the Federal role in international tourism. The goal of USTTA is to increase travel to the U.S. by carrying out trade development, trade policy, and statistical research programs designed to increase the American travel industry's awareness of the international market, facilitate entry of medium and small sized travel firms into the market, and eliminate barriers to market entry for those companies. In FY 1994, USTTA will generate $3 million in revenues for the General Fund.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase/ (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$17,480	$19,208	$20,298	$1,090
TOTAL APPROPRIATION	17,480	19,208	20,298	1,090
PERMANENT POSITIONS				
Appropriation:				
Salaries and expenses	94	94	96	2

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
International tourism development	79	$15,195	2	$2,500

Resources are required to provide grants to support the Cooperative Tourism Marketing Programs of state, local and non–profit organizations.

Comparison of Appropriation by Activity

U.S. TRAVEL AND TOURISM ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
International tourism development	79	$17,464	79	$15,195	81	$17,695	2	$2,500
Executive direction	15	2,380	15	2,603	15	2,603	0	0
TOTAL DIRECT OBLIGATIONS:	94	19,844	94	17,798	96	20,298	2	2,500
REIMBURSABLE OBLIGATIONS:	0	1,500	0	1,500	0	1,500	0	0
TOTAL OBLIGATIONS:	94	21,344	94	19,298	96	21,798	2	2,500
FINANCING:								
Offsetting collections from:								
Federal funds		(88)				(100)		
Non–Federal sources		(1,412)				(1,400)		
Unobligated balance, start of year:		(636)						
Subtotal, financing	0	(2,136)			0	(1,500)		
TOTAL BUDGET AUTHORITY:	94	19,208			96	20,298		
TOTAL APPROPRIATION:	94	19,208			96	20,298		

Summary of Changes from 1993 Appropriation

U.S. TRAVEL AND TOURISM ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1993			94	$19,208
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Disaster Relief Assistance	0	($3,600)		
Administrative Savings		(100)		
FTE Reduction		(123)		
Subtotal, adjustments			0	(3,823)
OTHER CHANGES:				
Additional amount in FY 1994 to provide full-year cost of 1993 Pay Raise		43		
Within-grade step increases		50		
Civil Service Retirement System (CSRS)		(14)		
Federal Employees Retirement System (FERS)		35		
Thrift Savings Plan		4		
Federal Insurance Contributions Act (FICA) – OASDI		10		
Health insurance premium		12		
Employees' Compensation Fund		24		
Travel:				
Per Diem		12		
Rental payments to GSA		72		
Communications, utilities and misc.		2		
Printing and reproduction		19		
Other services				
Working Capital Fund		52		
Other services		232		
Supplies and materials		3		
Overseas wage increases		98		
Overseas price increase		619		
FAAS Costs		1,140		
Subtotal, other changes			0	2,413
TOTAL, ADJUSTMENTS TO BASE			0	(1,410)
1994 base			94	17,798
Program changes			2	2,500
TOTAL REQUIREMENTS			96	20,298
1994 APPROPRIATION			96	20,298

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The National Oceanic and Atmospheric Administration's (NOAA) basic programs are grouped into six areas: National Ocean Service; National Marine Fisheries Service; Oceanic and Atmospheric Research; National Weather Service; National Environmental Satellite, Data, and Information Service; and Program Support. In addition, NOAA is responsible for managing a number of other program related accounts.

National Ocean Service (NOS):

Provides for the management of ocean and coastal resources, particularly in the 200–mile Exclusive Economic Zone (EEZ), and for improvements in quality, quantity, geographic distribution and timeliness of ocean observations. Mapping and charting activities produce aeronautical and nautical charts and supporting documents which are compiled and sold to the public and other Federal agencies. Understanding of the coastal environment is enhanced through the coastal science and the coastal zone management programs. NOAA also acquires and manages marine and estuarine sanctuaries of national significance.

National Marine Fisheries Service (NMFS):

Manages fisheries within the 200–mile EEZ to ensure the health of commercial and recreational fishery stocks. Fishery stocks are surveyed, catch data are collected, and research is conducted to better understand the variables affecting the abundance and variety of marine resources. Protection of endangered marine species and coastal and estuarine fishery habitats, enforcement of harvest quotas and regulations, and seafood quality and safety are also primary bureau activities. Research is conducted in conjunction with states on interjurisdictional and anadromous fishery resources.

Oceanic and Atmospheric Research (OAR):

Provides the research and technique development necessary to improve NOAA services (weather warnings and forecasts, solar–terrestrial services, climate predictions, and marine services) and the scientific basis for national policy formulation (e.g., climate and global change, Clean Air Act, and ozone depletion). Research is also conducted on a wide range of ocean and Great Lakes topics such as the interaction of oceans and atmosphere, the concentration and disposition of pollutants and fisheries recruitment.

National Weather Service:

Provides weather and flood warnings and forecasts to the general public and other users. Weather satellites and, staffed and automated stations on land and at sea gather meteorological observations of the atmosphere and the earth's surface. Based on these observations, professional meteorologists prepare warnings and forecasts and disseminate them to the public.

National Environmental Satellite, Data, and Information Service:

Provides for procurement and operation of the polar and geostationary environmental observing satellites, and management of NOAA's environmental data collections. These satellites provide meteorological data to the National Weather Service for use in developing warnings and forecasts. Environmental data and information are collected from NOAA and other sources, disseminated, and archived for future use.

Program Support:

Operates the fleet of NOAA ships and research aircraft. Also included are executive direction, the Systems Program Office, and central administrative services whereby NOAA provides centralized management concerning NOAA policy and planning objectives, individual program operations, legal counsel, congressional relations and public affairs. NOAA also provides management services to NOAA/DOC field offices through the regional Administrative Support Center network.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Operations, research and facilities	$1,461,999	$1,526,516	$1,757,672	$231,156
Geostationary Operational Environmental Satellite contingency fund	110,000	0	0	0
Fleet modernization, shipbuilding and conversion	33,200	30,000	23,064	(6,936)
Construction	34,917	94,500	79,063	(15,437)
Damage assessment and restoration revolving fund	0	0	0	0
Coastal zone management fund	0	0	0	0
Fishing vessel and gear damage compensation fund	1,281	1,306	1,335	29
Fisheries promotional fund	250	0	0	0
Fisherman's contingency fund	1,000	1,025	1,051	26
Fishing vessel obligations guarantees	1,770	470	0	(470)
Foreign fishing observer fund	(1,204)	565	564	(1)
TOTAL APPROPRIATION	1,643,213	1,654,382	1,862,749	208,367

TRANSFERS:	1992	1993	1994 Estimate	Increase (Decrease)
To: Operations, research and facilities (ORF)				
From:				
Promote and develop fishery products	$63,100	$55,000	$61,400	$6,400
Damage assessment and restoration revolving fund	6,447	17,506	1,500	(16,006)
Construction	0	2,225	0	(2,225)
Fleet modernization, shipbuilding & conversion	0	1,500	0	(1,500)
Subtotal, ORF	69,547	76,231	62,900	(13,331)
Promote and develop fishery products (P&D)				
From:				
Department of Agriculture	64,113	61,408	61,400	(8)
To:				
ORF	(63,100)	(55,000)	(61,400)	(6,400)
Subtotal, P&D	1,013	6,408	0	(6,408)
From damage assessment and restoration revolving fund (DARRF) to ORF	(6,447)	(17,506)	(1,500)	16,006
Unobligated balance transfer from Department of Interior	1,872	0	0	0
Subtotal, DARRF	(4,575)	(17,506)	(1,500)	16,006

TRANSFERS (continued):	1992	1993	1994 Estimate	Increase (Decrease)
From construction to ORF	$0	($2,225)	$0	$2,225
From fleet modernization, shipbuilding & conversion account to ORF	0	(1,500)	0	1,500
Total, NOAA Transfers	65,985	61,408	61,400	(8)
Prepayments of borrowing outstanding – Federal Ship Financing Fund	(4,354)	0	0	0
Obligation Limitation: Coastal zone management fund	(2,296)	0	0	0
TOTAL BUDGET AUTHORITY: (Federal Funds)	1,702,548	1,715,790	1,924,149	208,359
TRUST FUNDS:				
Aviation weather trust fund	35,389	0	0	0
TOTAL BUDGET AUTHORITY (All Funds)	1,737,937	1,715,790	1,924,149	208,359
Pending Supplemental		80,773		

PERMANENT POSITIONS

	1992	1993	1994 Estimate	Increase (Decrease)
Appropriation:				
Operations, research and facilities	11,988	12,257	12,366	109
Fleet modernization, shipbuilding and conversion	15	16	16	0
Construction	21	5	5	0
Coastal zone management fund	0	0	0	0
Fisheries promotional fund	1	0	0	0
Promote and develop American fisheries	7	7	0	(7)
Fishing vessel and gear damage compensation fund	4	4	4	0
Fisherman's contingency fund	1	1	1	0
Foreign fishing observer fund	3	5	5	0
Fishing vessel obligations guarantees	0	0	0	0
Federal ship financing fund	29	0	0	0
TOTAL:	12,069	12,295	12,397	102

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
National Ocean Service				
Mapping, charting, and geodesy	451	$50,368	(31)	($2,228)

An increase is requested to maintain the National Geodetic Survey at its current operating level (0 pos.; +$2,500). Decreases are requested for moving the printing function from the National Ocean Service to a contractor (−31 pos.; −$2,500); for the South Carolina Cooperative Geodetic Survey (0 pos.; −$554); and the geodetic land information system (0 pos.; −$1,674).

Observation and assessment	411	50,555	0	(665)

An increase is requested to maintain the National Water Levels Observation Network at its current operating level (0 pos.; +$1,000). Decreases are requested for the Chesapeake Bay observation buoys (0 pos.; −$400), California coastal observation buoys (0 pos.; −$140); Institute for Marine Engineering (0 pos.; −$500); marine protective structures (0 pos.; −$100); New York Harbor water quality model (0 pos.; −$75); and the Maui algal bloom crisis (0 pos.; −$450).

Ocean and coastal management	108	51,900	0	(1,104)

Decreases are requested for the Charleston, SC special area management plan (0 pos.; −$960); and state-specific marine sanctuary studies (0 pos.; −$144).

National Marine Fisheries Service

Information Collection and Analysis	1,461	$124,932	0	$3,948

An increase is requested to maintain critical activities in support of the collection, analysis and dissemination of the information required for the management of the Nation's living marine resources (0 pos.; +$7,484). This increase specifically will permit NMFS to provide the data necessary to implement existing fisheries management plans, protected species data collection and to maintain ongoing programs.

No funding is requested for the following projects or programs: oyster disease research (0 pos.; −$1,500); Stuttgart aquaculture (0 pos.; −$576); Hawaii stock management (0 pos.; −$500); Hawaiian monk seals (0 pos.; −$520); Center for Shark Research (0 pos.; −$140); and Atlantic bluefin tuna research (0 pos.; −$300).

Conservation and Management Operations	559	70,343	0	1,307

An increase is requested to enable NMFS to continue implementing fisheries management plans, recovery and conservation efforts for protected species, and the enforcement of laws and regulations (0 pos.; +$3,407).

Decreased funding is requested for the International Fisheries Commission (0 pos.; −$700).

No funding is requested for the following projects or programs: Columbia River smolt/squawfish (0 pos.; −$112); Pribilof Islands (0 pos.; −$300); Beluga Whale Committee (0 pos.; −$192); fishery observer training (0 pos.; −$96); and the East Coast observer training (0 pos.; −$700).

State and Industry Assistance Programs	220	23,458	0	55

An increase is requested in the fisheries development program to maintain critical seafood safety and trade support activities (0 pos.; +$1,009).

No funding is requested for the following projects or programs: anadromous fishery project (0 pos.; −$186); and the export strategies/Mahi Mahi program (0 pos.; −$768).

Oceanic and Atmospheric Research

Climate and air quality research	370	$80,926	0	$27,996

An increase is requested for long term climate and air quality research (0 pos.; +$ 2,396) to continue NOAA's global greenhouse gas measurements program and to address scientific issues associated with the Clean Air Act Amendments of 1990. Investment increases are also requested for two FCCSET initiatives: (1) High Performance Computing and Communications (0 pos.; +$2,600) which will allow NOAA to improve weather forecasts and climate predictions, and (2) the U.S. Global Change Research Program, of which NOAA's Climate and Global Change Program plays a critical role (0 pos.; +$23,000) in supporting climate research and the International Research Institute for Climate Prediction. The latter two increases are investment requests contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Atmospheric programs	385	42,332	0	(229)

An increase is requested for weather research (0 pos.; +$2,340) to provide an integrated program of developing new atmospheric observing technologies and advanced predictive tools geared toward increasing the accuracy of weather warnings and forecasts. An increase is also requested for solar terrestrial services and research (0 pos.; +$442) to allow full operation (24 hours/day, 7 days/week) of NOAA's Space Environmental Services Center which provides space weather data, and warnings and forecasts to a broad user community of government agencies, industry, and private individuals.

No funding is requested for the following projects or programs: federal/state weather modernization grants (0 pos.; −$2,639); and the southeastern storm research program (0 pos.; −$372).

Ocean and Great Lakes programs	217	80,826	0	(17,754)

Increases are requested for marine prediction research (0 pos.; +$422) and the Regional Marine Research Program (0 pos.; +$2,100) to allow NOAA to continue the study of environmental factors affecting marine resources, to provide the foundation for environmental management activities on critical coastal quality issues, and to support application of valuable new remote sensor data streams to these problems.

Decreased funding is requested for the National Undersea Research Program (0 pos.; −$13,885).

No funding is requested for the following projects or programs: Sea grant – zebra mussel (0 pos.; −$2,800); the Southeast Florida & Caribbean recruitment studies (0 pos.; −$1,000); GLERL zebra mussel (0 pos.; −$911); Lake Champlain study (0 pos.; −$190); Pacific island technical assistance (0 pos.; −$190); and the National Coastal Resources Institute (0 pos.; −$1,300).

National Weather Service

Operations and research	4,683	$401,359	284	$71,897

Additional funds are required for the National Weather Service to maintain current service levels during modernization as stipulated in P. L. 102–567 (0 pos.; +$20,348). Additional funds and personnel are required as an investment to continue the Modernization and Associated Restructuring Demonstration and Implementation program to prepare for the multi–site operational demonstration during FY 1996 (+284 pos.; +$52,497). The latter increase is an investment request contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Decreases are proposed as follows: reduce data buoy engineering and test activities (0 pos.; –$518); cancel three mountain weather observatory contracts (0 pos.; –$190); and discontinue funding the repair of the Samoa facilities (0 pos.; –$240).

Systems acquisition	146	125,751	0	74,093

Continued production and installation of Next Generation Weather Radar (NEXRAD) units (0 pos.; +$40,589); continued production and deployment of the Automated Surface Observing Systems (ASOS) program (0 pos.; +$625); development of the Advanced Weather Interactive Processing System (AWIPS) and NOAAPort (0 pos.; +$29,746); and continue supercomputer operations at the National Meteorological Center (0 pos.; +$3,133). These increases are investment requests contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

National Environmental Satellite, Data, and Information Service

Satellite observing systems/ data management	791	349,909	0	79,288

This request includes increases for the polar–orbiting satellite program (0 pos.; +$10,043) and the geostationary satellite program (0 pos.; +$66,181). These changes are due primarily to year–to–year fluctuations in the activities and associated costs in connection with launches, spacecraft and ground system procurements. These increases are investment requests contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package. Increases are also requested to continue critical operations necessary to provide products and services to the National Weather Service and other data users (0 pos.; +$1,782), as well as for Environmental Data Management Systems to continue storing, managing and providing timely access to environmental data (0 pos.; +$1,282).

Program Support

Administration and services	1,363	$73,319	0	$0

No changes are required for this item.

Marine services	853	63,181	0	(886)

Terminating funding for the marine electronics agenda (0 pos.; −$700); and the New England Science Center (0 pos., −$186) is proposed.

Aircraft services	95	9,495	0	0

No changes are requested for this item.

Other Appropriation Accounts

Coastal zone management fund	0	0	0	0

This fund was established under the Omnibus Budget Reconciliation Act of 1990 (Public Law 101−508, Section 6201−6216) to receive repayments from the coastal energy impact program. These payments are used for projects as authorized by section 308 of the Coastal Zone Management Act. No budget authority is requested in FY 1994.

Fishing vessel and gear damage fund	4	1,335	0	0

This fund provides compensation to fishing vessel owners who sustain losses or damage to their gear or vessels while engaged in fishing, provided that the loss is attributable to any foreign vessel, crew, or gear.

Fisherman's contingency fund	1	$1,051	0	$0

This fund is used to compensate domestic fisherman for the damage or loss of fishing gear and any resulting economic loss due to natural or man–made obstructions related to oil and gas development and exploration in the outer Continental Shelf.

Foreign fishing observer fund	5	564	0	0

This fund is financed through fees collected from foreign governments with fishing vessels within the exclusive fishery jurisdiction of the U.S. The fund is used to pay salaries, administrative costs, data entry and other expenses associated with the placement of observers aboard foreign fishing vessels.

Promote and develop... American fisheries	0	6,400	0	(6,400)

Balances in this fund are proposed to be used to offset marine fishery resource programs in the "Operations, Research, and Facilities" appropriation in FY 1994.

Fishing vessel obligation guarantee fund	0	483	0	(483)

The President's Budget proposes termination of this program in FY 1994 (0 pos.; –$483). This program's objectives have been accomplished and continued funding is no longer required.

Damage assessment and restoration revolving fund	0	(1,500)	0	0

Funds will be transferred to the Operations, Research and Facilities account for purposes of damage assessment and restoration. This fund receives proceeds from claims against responsible parties as determined through court settlements or agreements for both damage assessment and restoration costs.

Fleet modernization, shipbuilding and conversion	16	$27,594	0	($4,530)

Reduced funding is requested in order to continue the modernization of NOAA's fleet of 22 ships over the next 15 years. Emphasis in the program in the early years will be on repairing to extend service life, or converting existing vessels where feasible, with replacement occurring in subsequent years.

Construction	5	91,630	0	(12,567)

This fund was created as part of the FY 1992 Appropriation Act and represents the costs associated with the maintenance, construction, and consolidation of all NOAA facilities. Also included are costs pertaining to NOAA's on–going environmental compliance program. An increase is required for NEXRAD Weather Forecast Offices that will enable the National Weather Service to meet contractually determined requirements (0 pos.; +$14,651). This increase is an investment request contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package. Decreases are proposed as follows: Alaska fisheries center (0 pos.; –$95); Boston Biotechnology Innovation Center (0 pos.; –$953); Mystic CT. Maritime Education and Research Center (0 pos.; –$953); Columbia River facilities (0 pos.; –$7,822); University of New Hampshire Biological Science Center (0 pos.; –$14,309); Multi–species Aquaculture Center (0 pos.; –$381); Woods Hole Marine Biology Lab (0 pos.; –$953); and the Newport Marine Science Center (0 pos.; –$1,752).

Comparison of Appropriation by Activity

OPERATIONS, RESEARCH AND FACILITIES	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
NATIONAL OCEAN SERVICE:	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos.	Amount	Perm. Pos	Amount
Mapping, Charting, and Geodesy								
Mapping and Charting		$31,265		$32,238		$29,738		($2,500)
Subtotal	284	31,265	278	32,238	247	29,738	(31)	(2,500)
Geodesy		15,750		15,902		18,402		2,500
SC cooperative geodetic survey		554		554		0		(554)
Land Information System		1,674		1,674		0		(1,674)
Subtotal	176	17,978	173	18,130	173	18,402	0	272
Total, Mapping, Charting, and Geodesy	460	49,243	451	50,368	420	48,140	(31)	(2,228)
Observation and Assessment								
Observation and Prediction		16,720		16,748		17,748		1,000
Observation buoys/California		140		140		0		(140)
Observation buoys/Chesapeake Bay		400		400		0		(400)
Institute for Marine Engineering		500		500		0		(500)
Gulf of Maine data collection		0		0		0		0
Subtotal	171	17,760	168	17,788	168	17,748	0	(40)
Estuarine and Coastal Assessment		36,246		20,268		20,268		0
Marine protective structures		100		100		0		(100)
NY harbor water quality model		75		75		0		(75)
Subtotal	187	36,421	184	20,443	184	20,268	0	(175)
Coastal Ocean Science	60	12,000	59	11,874	59	11,874	0	0
Maui algal bloom crisis		450		450		0		(450)
Subtotal	60	12,450	59	12,324	59	11,874	0	(450)
Total, Observation and Assessment	418	66,631	411	50,555	411	49,890	0	(665)
Ocean and Coastal Management								
Coastal Management		40,345		40,035		40,035		0
Charleston, SC, spec. area mgt. plan		960		960		0		(960)
Non-point pollution control		1,920		1,920		1,920		0
Subtotal	50	43,225	49	42,915	49	41,955	0	(960)
Ocean Management		8,627		8,841		8,841		0
Hawaii humpback mar. sanct. institute		144		144		0		(144)
Subtotal	60	8,771	59	8,985	59	8,841	0	(144)
Total, Ocean and Coastal Management	110	51,996	108	51,900	108	50,796	0	(1,104)
TOTAL, NOS	988	167,870	970	152,823	939	148,826	(31)	(3,997)

	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount
NATIONAL MARINE FISHERIES SERVICE:								
Information Collection & Analyses								
Resource Information		$78,212		$78,645		$83,328		$4,683
Oyster disease research		1,500		1,500		0		(1,500)
Stuttgart		576		576		0		(576)
Hawaii stock management		500		500		0		(500)
Winter Run chinook salmon		500		500		500		0
Dolphin safe technologies		500		500		500		0
Fish cooperative inst. enhancement		384		384		384		0
Hawaiian monk seals		520		520		0		(520)
Stellar sea lion recovery plan		1,440		1,440		1,440		0
Atlantic bluefin tuna research		300		300		0		(300)
Hawaiian sea turtles		240		240		240		0
Center for Shark Research		140		140		0		(140)
Subtotal	959	84,612	941	85,245	941	86,392	0	1,147
Fishery Industry Information	203	18,030	199	18,050	199	18,926	0	676
Information Analyses & Dissemination		21,424		21,637		23,562		1,925
Subtotal	327	21,424	321	21,637	321	23,562	0	1,925
Total, Info., Collection, & Analyses	1,489	124,266	1,461	124,932	1,461	128,880	0	3,948
Conservation and Management Operations								
Fisheries Management Program		33,131		33,237		34,194		957
Columbia River smolt		112		112		0		(112)
International fisheries commission		1,100		1,100		400		(700)
Pribilof Islands		300		300		0		(300)
Beluga Whale Committee		192		192		0		(192)
Pacific pelagic species management		1,606		1,606		1,606		0
Subtotal	166	36,441	163	36,547	163	36,200	0	(347)
Protected Species Management		16,227		16,089		16,507		418
Fishery observer training		96		96		0		(96)
East Coast observers		700		700		0		(700)
Subtotal	175	17,023	172	16,885	172	16,507	0	(378)
Habitat Conservation	83	5,800	81	5,761	81	6,306	0	545
Enforcement & Surveillance	145	11,000	143	11,150	143	12,637	0	1,487
Total, Conservation and Mgmt. Operations	569	70,264	559	70,343	559	71,650	0	1,307
State and Industry Assistance Programs								
Grants to States		5,642		5,559		5,559		0
Anadromous grants		186		186		0		(186)
Louisiana emergency fund		5,100		0		0		0
Subtotal	0	10,928	0	5,745	0	5,559	0	(186)
Fisheries Development Program		16,800		16,945		17,954		1,009
Export strategies/mahi mahi		768		768		0		(768)
Subtotal	224	17,568	220	17,713	220	17,954	0	241
Total, State & Industry Assist. Progs	224	28,496	220	23,458	220	23,513	0	55
TOTAL, NMFS	2,282	223,026	2,240	218,733	2,240	224,043	0	5,310

	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
OCEANIC AND ATMOSPHERIC RESEARCH:								
Climate and Air Quality Research								
Interannual & Seasonal Climate Research	22	$7,909	22	$7,945	22	$7,945	0	$0
Long-term Climate and Air Quality Research	290	25,042	285	26,079	285	31,075	0	4,996
Climate and Global Change	64	46,997	63	46,902	63	69,902	0	23,000
Total, Climate and Air Quality Research	376	79,948	370	80,926	370	108,922	0	27,996
Atmospheric Programs								
Weather Research		33,670		34,395		36,735		2,340
Federal/State weather mod. grants		2,839		2,639		0		(2,639)
Southeastern Storm Research		372		372		0		(372)
Subtotal	314	36,881	308	37,406	308	36,735	0	(671)
Solar-Terrestrial Services and Research	79	4,650	77	4,926	77	5,368	0	442
Total, Atmospheric Program	393	41,531	385	42,332	385	42,103	0	(229)
Ocean and Great Lakes Programs								
Marine Prediction Research		16,404		16,825		17,247		422
Zebra mussel		911		911		0		(911)
SE Florida & Caribbean recruitment studies		1,000		1,000		0		(1,000)
Lake Champlain study		190		190		0		(190)
Pacific island technical assistance		190		190		0		(190)
Subtotal	188	18,695	184	19,116	184	17,247	0	(1,869)
Sea Grant		40,000		39,787		39,787		0
Sea grant – zebra mussels		2,800		2,800		0		(2,800)
National Coastal R&D Institute		1,300		1,300		0		(1,300)
Subtotal	25	44,100	25	43,887	25	39,787	0	(4,100)
Undersea Research Program								
National Undersea Research Program		15,998		15,923		2,038		(13,885)
Regional marine research programs		1,900		1,900		4,000		2,100
Subtotal	8	17,898	8	17,823	8	6,038	0	(11,785)
Total, Ocean and Great Lakes Programs	221	80,693	217	80,826	217	63,072	0	(17,754)
TOTAL, OAR	990	202,172	972	204,084	972	214,097	0	10,013
NATIONAL WEATHER SERVICE:								
Operations and Research								
Local Warnings and Forecasts.		$308,126		$310,989		$329,269		$18,280
MARDI		23,316		23,316		75,813		52,497
Data buoy engineering and test		518		518		0		(518)
Contract observers		190		190		0		(190)
Aviation weather forecasts		35,596		35,596		35,596		0
Samoa		240		240		0		(240)
Subtotal	4,378	367,986	4,379	370,849	4,663	440,678	284	69,829
Central Forecast Guidance	271	28,211	266	28,159	266	30,034	0	1,875
Atmospheric and Hydrological Research	39	2,350	38	2,351	38	2,544	0	193
Total, Operations and Research	4,688	398,547	4,683	401,359	4,967	473,256	284	71,897

	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Systems Acquisition								
Public Warning and Forecast Systems								
NEXRAD		$84,516		$82,956		$123,545		$40,589
ASOS		16,000		17,510		16,135		625
AWIPS/NOAAPort		23,779		13,818		43,564		29,746
NMC computer facility upgrade		7,826		11,467		14,600		3,133
Total, Systems Acquisition	146	134,121	146	125,751	146	199,844	0	74,093
TOTAL, NWS	4,837	532,668	4,829	527,110	5,113	673,100	284	145,990
NATIONAL ENVIRONMENTAL & SATELLITE, DATA, & INFORMATION SERVICE:								
Satellite Observing Systems								
Polar Spacecraft and Launching		$146,432		$152,056		$162,099		$10,043
Geostationary Spacecraft and Launching		116,000		116,585		182,746		66,161
Environmental Observing Services		47,600		48,502		50,284		1,782
Total, Satellite Observing Systems	664	314,032	652	317,123	652	395,129	0	78,006
Environmental Data Management Systems	142	32,646	139	32,786	139	34,068	0	1,282
TOTAL, NESDIS	806	346,678	791	349,909	791	429,197	0	79,288
PROGRAM SUPPORT:								
Administration and Services								
Executive Direction and Administration	276	$26,100	271	$26,369	271	$26,369	0	$0
Central Administrative Support	1,112	38,000	1,092	39,244	1,092	39,244	0	0
Retired Pay Commissioned Officers	0	7,333	0	7,706	0	7,706	0	0
Total, Administration and Services	1,388	71,433	1,363	73,319	1,363	73,319	0	0
Marine Services		60,314		62,295		62,295		0
Marine electronics agende		700		700		0		(700)
New England Science Center		186		186		0		(186)
Total, Marine Services	869	61,200	853	63,181	853	62,295	0	(886)
Aircraft Services	97	9,500	95	9,495	95	9,495	0	0
TOTAL, PROGRAM SUPPORT	2,354	142,133	2,311	145,995	2,311	145,109	0	(886)
TOTAL DIRECT OBLIGATIONS:	12,257	1,614,547	12,113	1,598,654	12,366	1,834,372	253	235,718
REIMBURSABLE OBLIGATIONS:	1,259	369,081	1,259	369,081	1,259	390,385	0	21,304
TOTAL OBLIGATIONS:	13,516	1,983,628	13,372	1,967,735	13,625	2,224,757	253	257,022

	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos	Amount
FINANCING:								
Unobligated balance, start of year								
Recoveries of prior year obligations		($11,800)		($13,800)		($13,800)	0	$0
Offsetting collections from:								
Federal funds	(1,259)	(332,128)	(1,259)	(332,128)	(1,259)	(353,650)	0	(21,522)
Non-Federal sources		(36,953)		(36,953)		(36,735)	0	216
Trust funds		0		0		0	0	0
Subtotal, financing	(1,259)	(380,881)	(1,259)	(382,881)	(1,259)	(404,185)	0	(21,304)
TOTAL BUDGET AUTHORITY:	12,257	1,602,747	12,113	1,584,854	12,366	1,820,572	253	235,718
TRANSFERS:								
From "Promote and develop ... American fisheries"		(55,000)		(55,000)		(61,400)	0	(6,400)
From "Damage assessment & restoration revolving fund"		(17,506)		(1,500)		(1,500)	0	0
Less transfers implemented pursuant to P.L. 102-395		(3,725)		0		0	0	0
Subtotal, Transfers	0	(76,231)	0	(56,500)	0	(62,900)	0	(6,400)
TOTAL APPROPRIATION (ORF):	12,257	$1,526,516	12,113	$1,528,354	12,366	$1,757,672	253	$229,316

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
OPERATIONS, RESEARCH AND FACILITIES	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			12,257	$1,532,741
Less December 17 proposed transfers – not implemented (P.L. 102–395)				(2,500)
Amount currently available, 1993			12,257	1,530,241
Less transfers implemented (P.L. 102–395)				(3,725)
Appropriation, 1993			12,257	1,526,516
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Personnel savings	(144)	($12,768)		
Administrative savings		(11,239)		
Emergency supplemental		(5,100)		
Subtotal, adjustments			(144)	(29,107)
TRANSFERS and FINANCING:				
From "Promote and develop American fisheries"		55,000		
From "Damage assessment & restoration revolving fund"		1,500		
From recoveries of prior year obligations		11,800		
Subtotal, transfers and financing			0	68,300
OTHER COST CHANGES:				
Continuation of 1993 operating level		3,725		
Salaries and benefits:				
Pay raise		4,586		
Full year cost in 1994 of positions financed for part year in 1993		1,016		
Law enforcement		25		
Within–grade step increase		6,710		
Civil Service Retirement System (CSRS)		(985)		
Federal Employees Retirement System (FERS)		1,840		
Thrift Savings Plan		281		
Federal Insurance Contributions Act (FICA) – OASDI		1,348		
NOAA CORPS		373		
Cost of living allowance		169		
Health insurance premium		2,040		
Miscellaneous items		0		
Employees' Compensation Fund		238		
Unemployment compensation		(3,560)		
Other objects:				
Transportation of things		419		
Rental payments to GSA		10,737		
Rental payments to others		278		

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Operations, research, and facilities	Perm. Pos.	Amount	Perm. Pos	Amount
Communications, utilities & misc. charges				
Rental of Equipment				
Other Telecommunication System		($4,878)		
Other telephone		(369)		
Utilities		139		
Printing and reproduction		364		
Other services:				
Working Capital Fund		(60)		
Other services		3,413		
Supplies and materials		1,730		
Equipment		746		
Grants		620		
Subtotal, other cost changes			0	$32,945
TOTAL, ADJUSTMENTS TO BASE			(144)	72,138
1994 base			12,113	1,598,654
Program changes			253	235,716
TOTAL REQUIREMENTS			12,366	1,834,372
TRANSFERS and FY 1994 FINANCING:				
Transfer from "Promote and develop ... American fisheries"				(61,400)
From "Damage Assessment and Restoration Revolving Fund"				(1,500)
Recoveries from prior year obligations				(13,800)
TOTAL, TRANSFERS AND FINANCING				(76,700)
1994 APPROPRIATION			12,366	1,757,672

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Coastal zone management fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
REIMBURSABLE OBLIGATIONS:								
Coastal zone management activities	0	$7,800	0	$7,800	0	$7,800	0	$0
TOTAL OBLIGATIONS:	0	7,800	0	7,800	0	7,800	0	0
FINANCING:								
Unobligated balance, start of year		(10,738)		(10,738)		(10,738)	0	0
Unobligated balance, end of year		10,738		10,738		10,738	0	0
Offsetting collections from:								
Non-Federal sources		(7,800)		(7,800)		(7,800)	0	0
Subtotal, financing	0	(7,800)	0	(7,800)	0	(7,800)	0	0
TOTAL BUDGET AUTHORITY:	0	0	0	0	0	0	0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Fisheries promotional fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Fisheries promotion	0	$100	0	$0	0	$0	0	$0
FINANCING:								
Unobligated balance, start of year		(100)		0		0	0	0
TOTAL BUDGET AUTHORITY:	0	0	0	0	0	0	0	0
TRANSFERS:								
From "Promote and develop ... American fisheries"		0		0		0	0	0
TOTAL APPROPRIATION:	0	0	0	0	0	0	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Fisheries promotional fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$0
Adjustments to base and built-in changes			0	0
Program change			0	0
1994 APPROPRIATION:			0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Promote and develop fishery products and research pertaining to American fisheries	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	7	$492	7	$415		$0	(7)	($415)
Saltonstall–Kennedy grants		6,951		5,965		0	0	(5,965)
TOTAL DIRECT OBLIGATIONS:	7	7,443	7	6,400	0	0	(7)	(6,400)
FINANCING:								
Unobligated balance, start of year		(1,035)		0		0	0	0
TOTAL BUDGET AUTHORITY:	7	6,408	7	6,400	0	0	(7)	(6,400)
TRANSFERS:								
From Department of Agriculture		(61,408)		(61,400)		(61,400)	0	0
To "Operations, research, and facilities"		55,000		55,000		61,400	0	6,400
To "Fisheries promotional fund"		0		0			0	0
TOTAL APPROPRIATION:	7	0	7	0	0	0	(7)	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Promote and develop fishery products and research pertaining to American fisheries	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			7	$0
Program change			(7)	0
1994 APPROPRIATION:			0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Fishing vessel and gear damage compensation fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	4	$264	4	$190	4	$190	0	$0
Payment of claims		1,475		1,145		1,145	0	0
TOTAL DIRECT OBLIGATIONS:	4	1,739	4	1,335	4	1,335	0	0
FINANCING:								
Unobligated balance, start of year		(433)		0		0	0	0
TOTAL APPROPRIATION:	4	1,306	4	1,335	4	1,335	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Fishing vessel and gear damage compensation fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			4	$1,306
Adjustments to base and built-in changes				29
1994 APPROPRIATION:			4	1,335

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Fisherman's contingency fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	1	$68	1	$46	1	$46	0	$0
Payment of claims		1,441		1,005		1,005	0	0
TOTAL DIRECT OBLIGATIONS:	1	1,509	1	1,051	1	1,051	0	0
FINANCING:								
Unobligated balance, start of year		(484)					0	0
TOTAL APPROPRIATION:	1	1,025	1	1,051	1	1,051	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Fisherman's contingency fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			1	$1,025
Adjustments to base and built-in changes			0	26
1994 APPROPRIATION:			1	1,051

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Foreign fishing observer fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Foreign fishing observer fund	5	$651	5	$564	5	$564	0	$0
FINANCING:								
Unobligated balance, start of year		(86)					0	0
TOTAL APPROPRIATION:	5	565	5	564	5	564	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Foreign fishing observer fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			5	$565
Adjustments to base and built-in changes			0	(1)
1994 APPROPRIATION:			5	564

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Damage assessment and restoration revolving fund (DARRF)	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS								
DARRF	0	$567	0	$0	0	$0	0	$0
TOTAL OBLIGATIONS:	0	567	0	0	0	0	0	0
FINANCING:								
Unobligated balance, start of year	0	(7,758)	0	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0	0	0	0
Offsetting collections	0	(10,315)	0	(1,500)	0	(1,500)	0	0
TOTAL BUDGET AUTHORITY	0	(17,508)	0	(1,500)	0	(1,500)	0	0
TRANSFERS								
To Operations, Research & Facilities	0	17,508	0	1,500	0	1,500	0	0
TOTAL APPROPRIATION:	0	0	0	0	0	0	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Damage assessment and restoration revolving fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$0
Adjustments to base and built-in changes			0	0
1994 APPROPRIATION			0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Federal ship financing fund, fishing vessels	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Support services		$7,280					0	$0
Disbursements for loan guarantee claims		4,507					0	0
TOTAL DIRECT OBLIGATIONS:	0	11,787	0	$0	0	$0	0	0
FINANCING:								
Offsetting collections from								
Non-Federal sources		(7,500)					0	0
Unobligated balance, start of year		(4,287)					0	0
Subtotal, financing	0	(11,787)	0	0	0	0	0	0
AUTHORITY TO BORROW:	0	0	0	0	0	0		

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Aviation weather trust fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Aviation weather services:							0	$0
TOTAL APPROPRIATION:	0	$0	0	$0	0	$0	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Aviation weather trust fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$0
Adjustments to base and built-in changes				
1994 APPROPRIATION			0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND	1993		1994		1994		Increase/	
ATMOSPHERIC ADMINISTRATION	Currently Available		Base		Estimate		(Decrease)	
Geostationary Operational Environmental Satellite contingency fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS								
GOES contingency fund		$16,575					0	$0
TOTAL OBLIGATIONS:	0	16,575	0	$0	0	$0	0	0
FINANCING:								
Unobligated balance, start of year		(90,516)		(73,941)		(73,941)	0	0
Unobligated balance, end of year		73,941		73,941		73,941	0	0
TOTAL BUDGET AUTHORITY	0	0	0	0	0	0	0	0
TOTAL APPROPRIATION	0	0	0	0	0	0	0	0

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND				
ATMOSPHERIC ADMINISTRATION	1994 Estimate			
Geostationary Operational Environmental Satellite contingency fund	Detailed		Summary	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$0
Program change				
1994 APPROPRIATION:			0	0

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND	1993		1994		1994		Increase/	
ATMOSPHERIC ADMINISTRATION	Currently Available		Base		Estimate		(Decrease)	
Fleet Modernization, shipbuilding and conversion	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS								
Fleet modernization	16	$49,568	16	$27,594	16	$23,064	0	($4,530)
TOTAL OBLIGATIONS:	16	49,568	16	27,594	16	23,064	0	(4,530)
FINANCING:								
Unobligated balance, start of year		(21,068)					0	0
Transfer to other accounts		1,500					0	0
TOTAL APPROPRIATION:	16	30,000	16	27,594	16	23,064	0	(4,530)

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Fleet Modernization, shipbuilding and conversion	Perm. Pos.	Amount	Perm. Pos	Amount
Appropriation currently available, 1993			16	$30,000
Adjustments to base and built-in changes				(2,406)
Program change				(4,530)
1994 APPROPRIATION			16	23,064

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Construction	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS								
Facilities maintenance, construction and consolidation	5	$108,232	5	$91,630	5	$79,063	0	($12,567)
TOTAL OBLIGATIONS:	5	108,232	5	91,630	5	79,063	0	(12,567)
FINANCING:								
Unobligated balance, start of year		(15,957)					0	0
Transfer to other accounts		2,225					0	0
TOTAL APPROPRIATION:	5	94,500	5	91,630	5	79,063	0	(12,567)

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
Construction	Detailed		Summary	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			5	$94,500
Adjustments to base and built-in changes				(2,870)
Program change				(12,567)
1994 APPROPRIATION			5	79,063

Comparison of Appropriation by Activity

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Fishing vessel obligation guarantee program	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS								
Administrative expenses							0	$0
Investments and loans		$470		$483			0	(483)
TOTAL OBLIGATIONS:	0	470	0	483	0	$0	0	(483)
FINANCING:								
Unobligated balance, start of year							0	0
TOTAL APPROPRIATION:	0	470	0	483	0	0	0	(483)

Summary of Changes from 1993 Appropriation

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Fishing vessel obligation guarantee program	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$470
Adjustments to base and built-in changes				13
Program change				(483)
1994 APPROPRIATION			0	0

PATENT AND TRADEMARK OFFICE

The Patent and Trademark Office (PTO) is charged with administering the patent and trademark laws of the United States. PTO examines patent applications, grants patent protection to qualified inventions and disseminates technological information disclosed in patents. PTO also examines trademark applications and provides Federal registration to owners of qualified trademarks.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses Funding Level	$419,441	$473,672	$518,692	$45,020
Fee Collections	(331,000)	(387,000)	(415,692)	(28,692)
TOTAL APPROPRIATION	88,441	86,672	103,000	16,328
GENERAL FUND:	1,547	0	0	0
SPECIAL FUND:	86,894	86,672	103,000	16,328
OFFSETTING RECEIPTS:	95,000	99,000	103,000	4,000
PERMANENT POSITIONS				
Appropriation:				
Salaries and expenses	5,852	5,291	5,237	(54)

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Patent process	2,969	$291,603	161	$28,251

An increase is requested to continue deployment of the Automated Patent System's (APS) classified search and image retrieval system, and to continue development of the Patent Application Management (PAM) system which will automate the patent application process (0 pos.; $+7,950). An increase is requested for additional professional and clerical staff to handle the anticipated increase in patent applications from 182,000 cases in 1993 to 189,000 in 1994 and to maintain patent pendency at 18.9 months (+161 pos.; +$17,683). Increased funding for patent printing and reproduction provides for the printing of 103,687 patents (0 pos.; +$2,618).

Trademark process	492	35,174	0	1,705

In 1994, funds will be used to fully fund current professional and clerical staff to handle the continued increase in trademark applications from 130,000 in 1993 to 138,000 in 1994 (0 pos.; +$1,658). An increase is needed to process the growing number of trademark appeal cases (0 pos.; +$47). The Office is requesting a trademark fee increase above the increase in the Consumer Price Index (CPI) in order to fully fund the entire trademark operation at budgeted staffing levels. The proposed fee rate will be passed in the FY 1994 authorization bill.

Information dissemination	1,068	72,867	59	1,793

Resources are requested to handle the anticipated increase in patent and trademark applications through pre-examination processing (+25 pos.; +$1,255). Resources are requested to respond to increased demand for PTO services to support public search room services (+3 pos.; +$364); to process additional printing workload (+9 pos.;+$161); to improve the integrity of patent search files, and to enhance examiner search files by providing additional searching tools and data bases for biotechnology (+22 pos.; +$1,658). Automation of the assignment system reduces costs (0 pos.; −$1,645).

Executive direction	477	85,446	11	1,853

Resources are requested to the Office of Enrollment and Discipline to handle continuing increases in the number of applicants desiring to be admitted as patent attorneys and agents to practice before the PTO (+1 pos.; +$72). Increases are provided for Financial Management and Human Resources Management to expand the capabilities of the new accounting system and to keep pace with growing demands for personnel services (+10 pos.; +$763). A reduction is requested for the Automation line item to reflect lower than anticipated support services (0 pos.; −$39). An increase is requested to lease additional space for expanded PTO operations (0 pos.; +$1,057).

Offsetting collections	$387,000	$28,692
Offsetting receipts	99,000	4,000

For 1993, patent and trademark fees were increased by 3.2 percent in the aggregate on October 1, 1992. All fees, except trademark application fees, will remain the same in 1994 due to administrative and space rental savings. The trademark application fee increases to $245.00 to assure the provision of resources required to address trademark workloads. Current trademark income does not cover all costs. The PTO will collect $415,692 thousand in offsetting collections in FY 1994 in addition to $103,000 thousand collected through offsetting receipts. Increased fee collections reflect the growth in patent workloads.

Comparison of Appropriation by Activity

	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
PATENT AND TRADEMARK OFFICE								
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
OBLIGATIONS:								
Patent process	3,118	$289,261	2,969	$291,603	3,130	$319,854	161	$28,251
Trademark process	477	37,093	492	35,174	492	36,879	0	1,705
Information dissemination	1,160	71,974	1,066	72,867	1,127	74,660	59	1,793
Executive direction	536	89,316	477	85,646	488	87,499	11	1,853
TOTAL OBLIGATIONS:	5,291	487,644	5,006	485,290	5,237	518,892	231	33,602
FINANCING:								
Offsetting collections from:								
Non-Federal sources (Fees)		(387,000)				(415,692)		
Federal funds		(450)				(200)		
Unobligated balance, start of year		(13,522)				0		
Subtotal, financing	0	(400,972)			0	(415,892)		
TOTAL BUDGET AUTHORITY:	5,291	86,672			5,237	103,000		
TOTAL APPROPRIATION:	5,291	86,672			5,237	103,000		
General Fund		0				0		
Special Fund		86,872				103,000		

Summary of Changes from 1993 Appropriation

PATENT AND TRADEMARK OFFICE	1994 Estimate			
	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
APPROPRIATIONS:				
General Fund				$0
Special Fund				86,672
Fee Collections, 1993				387,000
Subtotal			5,291	$473,672
ADJUSTMENTS TO BASE:				
ADJUSTMENTS:				
Restoration of base reductions	0	$12,328		
FTE reestimate	(208)	0		
Administrative Savings	0	(668)		
FTE reduction	(77)	(5,301)		
Subtotal, adjustments			(285)	6,359
OTHER CHANGES:				
Additional amount in FY 1994 to provide full-year cost of 1993 increases		4,945		
1993 Pay Raise		378		
Within-Grade step increases		2,586		
Civil Service Retirement System (CSRS)		(358)		
Federal Employees Retirement System (FERS)		660		
Thrift Savings Plan		102		
Federal Insurance Contributions Act (FICA) - OASDI		739		
Health insurance premium		768		
Travel and Transportation		2		
Rent payments to GSA		(6,759)		
Rent payments to others		2		
Printing and reproduction		1,260		
WITS		(709)		
Supplies and materials		74		
Other services		1,292		
Equipment		28		
Employees' Compensation Fund		49		
Subtotal, other changes			0	5,059
TOTAL ADJUSTMENTS TO BASE			(285)	11,418
1994 base			5,006	485,090
Program changes			231	33,602
TOTAL REQUIREMENTS			5,237	518,692
FEE COLLECTIONS, 1994				(415,692)
1994 BUDGET AUTHORITY			5,237	103,000
Special Fund Appropriation				103,000

TECHNOLOGY ADMINISTRATION

The Technology Administration (TA) provides leadership in achieving the goals of the U.S. Government's technology program, both within Commerce and through the intergovernmental process. TA develops and fosters technology policy that encourages commercializing R&D and promotes an internationally competitive manufacturing sector in our nation. TA implements these goals through: promoting government/industry partnerships to create and use technologies; identifying and advocating policy options to increase the availability of long term capital for technology investments; removing barriers and creating incentives to improve the U.S. manufacturing base; and leadership on the Federal Coordinating Council on Science, Engineering and Technology and the Interagency Committee on Federal Technology Transfer. TA also provides oversight for the National Institute of Standards and Technology and the National Technical Information Service.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$4,600	$4,450	$5,425	$975
NTIS Revolving Fund	0	8,000	0	(8,000)
TOTAL APPROPRIATION	4,600	12,450	5,425	(7,025)
PERMANENT POSITIONS				
Appropriation:				
Salaries and expenses	43	43	43	0

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Under Secretary for Technology	43	$4,425	0	$1,000

Increased funding will be used to implement the U.S.–Japan Manufacturing Technology Fellowship Program (MTF). The MTF is a cooperative effort with the Japanese to place up to 60 U.S. manufacturing engineers in Japanese factories for up to one year (0 pos., +$500). An increase is also requested to support implementation of technology policies and private sector strategies which will spur U.S. businesses to become more competitive (0 pos., +$500).

Comparison of Appropriation by Activity

TECHNOLOGY ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Under Secretary for Technology	43	$4,636	43	$4,425	43	$5,425	0	$1,000
TOTAL DIRECT OBLIGATIONS:	43	4,636	43	4,425	43	5,425	0	1,000
REIMBURSABLE OBLIGATIONS:		868		779		425	0	(354)
TOTAL OBLIGATIONS:	43	5,504	43	5,204	43	5,850	0	646
FINANCING:								
Offsetting collections from:								
Federal funds		(868)				(425)		
Subtotal, financing	0	(868)			0	(425)		
TOTAL BUDGET AUTHORITY:	43	4,636			43	5,425		
Less Transfers Implemented Pursuant to P.L. 102–395	0	(186)			0	0		
TOTAL APPROPRIATION:	43	4,450			43	5,425		

Summary of Changes from 1993 Appropriation

	1994 Estimate			
TECHNOLOGY ADMINISTRATION	Detailed		Summary	
Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as show in 1994 President's Budget, 1993			43	$4,650
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)			0	(14)
Amount Currently Available, 1993				4,636
Less Transfers Implemented (P.L. 102–395)			0	(186)
Appropriation currently available, 1993			43	4,450
ADJUSTMENTS TO BASE:				
OTHER CHANGES:				
1993 Pay Raise		$17		
Within–grade step increases		36		
Civil Service Retirement System (CSRS)		(14)		
Federal Employees Retirement System (FERS)		26		
Thrift Savings Plan		4		
Federal Insurance Contributions Act (FICA) – OASDI		8		
Health insurance premium		10		
Travel and Transportation		1		
Rent payments to GSA		12		
Communications, utilities and misc. charges		5		
Printing and reproduction		2		
Other services				
Working Capital Fund		(133)		
Supplies and materials		1		
Subtotal, other changes			0	(25)
TOTAL ADJUSTMENTS TO BASE			0	(25)
1994 base			43	4,425
Program changes			0	1,000
TOTAL REQUIREMENTS			43	5,425
1994 APPROPRIATION			43	5,425

Comparison of Appropriation by Activity

TECHNOLOGY ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
NTIS Revolving Fund	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
TOTAL DIRECT OBLIGATIONS:	0	$0	0	$0	0	$0	0	$0
REIMBURSABLE OBLIGATIONS:	347	68,000	415	68,000	415	68,000	0	0
TOTAL OBLIGATIONS:	347	68,000	415	68,000	415	68,000	0	0
FINANCING:								
Unobligated balance, transferred		(7,053)		(14,853)		(14,853)		
Unobligated balance, end of year		14,853		14,853		14,853		
Offsetting collections from:								
Federal funds	(49)	(9,520)	(58)	(9,520)	(58)	(9,520)		
Non-Federal sources	(298)	(58,480)	(357)	(58,480)	(357)	(58,480)		
Subtotal, financing	(347)	(60,200)	(415)	(68,000)	(415)	(68,000)		
TOTAL BUDGET AUTHORITY:	0	7,800	0	0	0	0		
Plus Transfers Implemented Pursuant to P.L. 102-395	0	200	0	0	0	0		
TOTAL APPROPRIATION:	0	8,000	0	0	0	0		

Summary of Changes from 1993 Appropriation

TECHNOLOGY ADMINISTRATION	1994 Estimate Detailed		1994 Estimate Summary	
NTIS Revolving Fund	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	$8,000
ADJUSTMENTS TO BASE:				
One-time appropriation				(8,000)
TOTAL, ADJUSTMENTS TO BASE			0	(8,000)
1994 base			0	0
Program changes			0	0
TOTAL REQUIREMENTS			0	0
1994 APPROPRIATION			0	0

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

The National Institute of Standards and Technology (NIST) provides a wide range of measurements, services, test methods and data to support U.S. competitiveness in world markets.

This is accomplished through scientific research; cooperative efforts with public and private research institutions; and technology transfer programs including the Manufacturing Extension Partnership and the Advanced Technology Program. These activities allow NIST to maintain national standards for measurements; support domestic and international voluntary standards processes, promote technology innovation; support secure and reliable Federal computer systems; and spur advances in applied and developmental research being conducted by U.S. industries. The investment request is contigent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Scientific and technical research and services	$183,000	$192,940	$240,988	$48,048
Industrial technology services	63,713	86,067	232,524	146,457
Construction of research facilities	0	105,000	61,686	(43,314)
TOTAL APPROPRIATION	246,713	384,007	535,198	151,191
Working capital fund	[2,055]	[876]	[8,684]	[7,808]
Transfer to other bureaus	0	(1,250)	0	1,250
TOTAL BUDGET AUTHORITY	246,713	382,757	535,198	152,441
Pending Aupplemental		117,403		

PERMANENT POSITIONS

Appropriation:	1992	1993	1994 Estimate	Increase (Decrease)
Scientific and technical research and services	1,627	1,696	2,046	350
Industrial technology services	19	91	185	94
Working Capital Fund	1,274	1,244	873	(371)
Construction of research facilities	0	0	5	5
TOTAL:	2,920	3,031	3,109	78

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Scientific and technical research and services				
Electronics and electrical engineering	258	$26,668	32	$4,000

Increased funding will be used to accelerate the development of improved measurement technologies, standards, and advanced instrumentation to help U.S. companies improve their competitive position in the worldwide electronics manufacturing market (+32 pos.; +$4,000).

Manufacturing engineering	112	10,200	31	4,200

To work closely with industry to promote U.S. competitiveness through accelerated investment in advanced manufacturing technologies, this initiative will develop cutting-edge laboratory capabilities in the standards, measurement, control, and processing aspects of advanced manufacturing (+31 pos.; +$4,200).

Chemical science and technology	192	$20,054	26	$3,000

Increased funding will allow NIST to provide new measurement techniques and standards and the engineering technology needed to improve processing efficiency, minimize or eliminate chemical wastes, and accelerate the commercialization of bio– and chemical products. (+26 pos.; +$3,000).

Materials science and engineering	287	40,636	61	6,600

Increased funding will enable NIST to participate with industry in bridging the gap between bench–scale conception and commercial utilization of advanced materials and advanced processing. NIST will involve industry in every stage of the R&D to ensure that the technology developed is relevant to industry's needs and to ensure that it is readily transferred to industry (+61 pos.; +$6,600).

Information Infrastructure	138	13,080	200	24,000

To focus our national efforts toward technologies crucial to today's businesses and growing economy, reduce barriers to commercialization, and facilitate industry and government efforts to improve quality, this increase will enable NIST to expand and integrate its programs in high performance computing, performance measurement, communications protocols, advanced software, advanced manufacturing applications, R&D, and the development of the National Research and Education Network (NREN) (+200 pos., +$24,000).

Technology assistance	85	8,534	12	2,000

To promote long–term economic growth through increased international competitiveness, this initiative will enhance the flow of vital standards–related information from Commerce to manufacturers and exporters (+12 pos., +$2,000).

Industrial Technology Services

Advanced technology program	77	$67,489	62	$132,000

To strengthen industry–government cooperation and to provide more Federal support for commercial R&D, the Advanced Technology Program will be significantly expanded. The additional funding will allow NIST to hold at least two additional open competitions and at least two technology specific competitions during FY 1994 (+62 pos., +$132,000). NIST will work with industry and other parts of the Federal government to define broad technology areas for these competitions, taking into account information gleaned from past program experience.

Technology transfer and outreach	33	19,035	13	14,000

Increased funding will enable NIST to expand its Manufacturing Extension Partnership Program, (+9 pos., +$12,000). Funding will support expanded quality outreach efforts by administering the Malcolm Baldrige National Quality Award and initial assessment of expansion of the award into the education and healthcare arenas (+4 pos., +$2,000).

Comparison of Appropriation by Activity

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY – STRS	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Measurement and engineering Research and standards:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Electronics & electrical engineering	260	$26,175	258	$26,668	290	$30,668	32	$4,000
Manufacturing engineering	114	10,088	112	10,200	143	14,400	31	4,200
Chemical science & technology	194	19,569	192	20,054	218	23,054	26	3,000
Physics	225	26,482	223	26,884	223	26,884	0	0
Materials science & engineering	290	39,935	287	40,636	348	47,236	61	8,600
Building & fire research	113	12,091	113	12,873	113	12,673	0	0
Computer systems	140	12,463	138	13,080	338	37,080	200	24,000
Applied mathematics & scientific computing	70	8,829	70	7,002	70	7,002	0	0
Technology assistance	85	8,920	85	8,534	97	10,534	12	2,000
Research support activities	205	39,230	206	31,257	206	31,257	0	0
Obligated through Working Capital Fund				(50)		(6,690)	0	(6,640)
TOTAL DIRECT OBLIGATIONS:	1,696	201,782	1,684	197,138	2,046	234,298	362	37,160
REIMBURSABLE OBLIGATIONS:							0	0
TOTAL OBLIGATIONS:	1,696	201,782	1,684	197,138	2,046	234,298	362	37,160
FINANCING:								
Offsetting collections from:							0	0
Federal funds							0	0
Non-federal sources								
Unobligated balance, start of year		(9,718)					0	0
Subtotal, financing	0	(9,718)	0	0	0	0	0	0
TOTAL BUDGET AUTHORITY:	1,696	192,064	1,684	197,138	2,046	234,298	362	37,160
TRANSFERS:								
To Working capital fund		876		50		6,690	0	6,640
TOTAL APPROPRIATION	1,696	192,940	1,684	197,188	2,046	240,988	362	43,800

Summary of Changes from 1993 Appropriation

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY — STRS	1994 Estimate			
	Detailed		Summary	
Measurement and engineering research and standards:	Perm. Pos	Amount	Perm. Pos	Amount
Amount available as shown in 1994 President's Budget, 1993			1,696	$194,064
Plus December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				(2,000)
Plus transfer to Working Capital Fund				876
Appropriation, 1993			1,696	192,940
ADJUSTMENTS TO BASE:				
TRANSFERS:				
To CRF (A&E Study)	(5)	($5,000)		
To ITS (Quality Outreach Program)	(7)	(800)		
Subtotal, transfers			(12)	(5,800)
ADJUSTMENTS:				
Reactor Heavy Water		4,000		
FY 1994 Supercomputer Adjustment		(925)		
Subtotal, adjustments			0	3,075
OTHER CHANGES:				
1993 Pay Raise		895		
Within–Grade step increases		1,117		
Civil Service Retirement System (CSRS)		(140)		
Federal Employees' Retirement System (FERS)		259		
Thrift savings plan		40		
Federal Insurance Contributions Act (FICA) – OASDI		108		
Health insurance premium		560		
Employees' Compensation Fund		(65)		
Travel		84		
Transportation of things		7		
Rental payments to others		5		
Communications, utilities, and miscellaneous charges				
Rental of Equipment		32		
Other telephone		5		
Utilities		764		
Printing and reproduction		17		
Other Services				
Working Capital Fund		76		
Other services		1,899		
Supplies and materials		186		
Equipment		1,124		
Subtotal, other changes			0	6,973
TOTAL, ADJUSTMENTS TO BASE			(12)	$4,248
1994 base			1,684	197,188
Program changes			362	43,800
Transfer to Working Capital Fund				(6,690)
TOTAL REQUIREMENTS – BA			2,046	234,298
Working Capital Fund transfer				6,690
1994 APPROPRIATION:			2,046	240,988

Comparison of Appropriation by Activity

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY -- ITS	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Extramural Programs	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Advanced technology program	77	$110,238	77	$67,489	139	$199,489	62	$132,000
Technology transfer and outreach	14	20,960	33	19,035	46	33,035	13	14,000
Obligated through WCF		0		0		(1,994)	0	(1,994)
TOTAL DIRECT OBLIGATIONS:	91	131,198	110	86,524	185	230,530	75	144,006
REIMBURSABLE OBLIGATIONS:							0	0
TOTAL OBLIGATIONS:	91	131,198	110	86,524	185	230,530	75	144,006
FINANCING:								
Offsetting collections from:							0	0
Federal funds							0	0
Non-Federal sources								
Unobligated balance, start of year		(45,131)					0	0
Unobligated balance, and of year								0
Subtotal, financing	0	(45,131)	0	0	0	0	0	0
TOTAL BUDGET AUTHORITY:	91	86,067	110	86,524	185	230,530	75	144,006
TRANSFERS:								
To working capital fund	0	0	0	0	0	1,994	0	1,994
TOTAL APPROPRIATION	91	86,067	110	86,524	185	232,524	75	146,000

Summary of Changes from 1993 Appropriation

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY – ITS	1994 Estimate			
	Detailed		Summary	
Extramural Programs	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			91	$86,067
ADJUSTMENTS TO BASE:				
TRANSFERS:				
From WCF (Quality Outreach Program)	12	0		
From STRS (Quality Outreach Program)	7	$800		
Subtotal, transfers			19	800
ADJUSTMENTS:				
Limits on Grant Overhead			0	(493)
OTHER CHANGES:				
1993 Pay Raise			0	10
Within-grade step increases			0	13
Civil Service Retirement System (CSRS)			0	(2)
Federal Employees' Retirement System (FERS)			0	3
Federal Insurance Contributions Act (FICA) – OASDI			0	1
Health Insurance Premium			0	6
Travel			0	5
Transportation of things			0	2
Communications, utilities, and miscellaneous charges				
Rental of Equipment			0	1
Utilities			0	17
Printing and reproduction			0	7
Other Services				
Working Capital Fund			0	1
Other services			0	70
Supplies and materials			0	11
Equipment			0	5
Subtotal, other changes			0	150
TOTAL ADJUSTMENTS TO BASE			19	457
1994 base			110	86,524
Program changes			75	146,000
Transfer to Working Capital Fund			0	(1,994)
TOTAL REQUIREMENTS – BA			185	230,530
Working Capital Fund Transfer			0	1,994
1994 APPROPRIATION			185	232,524

Comparison of Appropriation by Activity

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Construction of Research facilities	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Construction and major renovations	0	$103,750	5	$61,686	5	$61,686	0	$0
TOTAL DIRECT OBLIGATIONS:	0	103,750	5	61,686	5	61,686	0	0
REIMBURSABLE OBLIGATIONS:							0	0
TOTAL OBLIGATIONS:	0	103,750	5	61,686	5	61,686	0	0
FINANCING:								
Offsetting collections from							0	0
Federal funds							0	0
Non-Federal sources								
Unobligated balance, start of year							0	0
Unobligated balance, end of year								0
Subtotal, financing	0	0	0	0	0	0	0	0
TOTAL BUDGET AUTHORITY:	0	103,750	5	61,686	5	61,686	0	0
Plus Transfers Implemented Pursuant to P.L. 102-395	0	1,250				0	0	0
TOTAL APPROPRIATION	0	105,000	5	61,686	5	61,686	0	0

Summary of Changes from 1993 Appropriation

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	1994 Estimate			
	Detailed		Summary	
Construction of research and facilities	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount available as shown in 1994 President's Budget, 1993			0	$99,750
Plus December 17 Proposed Transfers – Not Implemented (P.L. 102-395)			0	4,000
Amount Currently Available, 1993			0	103,750
Plus Transfers Implemented (P.L. 102-395)			0	1,250
Appropriation, 1993			0	105,000
ADJUSTMENTS TO BASE:				
TRANSFERS:				
From STRS			5	5,000
OTHER CHANGES:				
Facilities Savings (one time reduction)	0	($43,314)		
A&E study reduction	0	(5,000)		
Subtotal, other changes			0	(48,314)
TOTAL ADJUSTMENTS TO BASE			0	(43,314)
1994 base			0	61,686
TOTAL REQUIREMENTS			0	61,686
1994 APPROPRIATION:			0	61,686

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

The National Telecommunications and Information Administration (NTIA) is responsible for formulation of national policy to support the development, growth and deregulation of the telecommunications and information industries; furthering the efficient development and use of telecommunications and information services; and allocating and managing Federal use of the radio frequency spectrum. NTIA administers the Public Telecommunications Facilities Program (PTFP) which provides grants for planning and construction of non–commercial telecommunications facilities and the National Endowment for Children's Educational Television (NECET) which awards grants to support the creation and production of television programming specifically directed toward the development of fundamental intellectual skills in children. Beginning in FY 1994, NTIA will also administer the National Information Infrastructure (NII) Grant Program which will award grants for the planning and construction of telecommunication infrastructures.

APPROPRIATION SUMMARY

(Dollars in Thousands)

	1992	1993	1994 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and Expenses	$17,600	$17,900	$21,927	$4,027
Public Telecommunications Facilities, Planning, and Construction	19,925	21,320	20,636	(684)
Endowment for Children's Educational Television	2,000	1,000	1,000	0
National Information Infrastructure (NII) Program	0	0	51,000	51,000
TOTAL APPROPRIATION	39,525	40,220	94,563	54,343
Pending Supplemental		63,867		

PERMANENT POSITIONS

Appropriation:	1992	1993	1994 Estimate	Increase (Decrease)
Salaries and Expenses	195	195	217	22
Public Telecommunications Facilities, Planning, and Construction	15	45	15	(30)
Endowment for Children's Educational Television	1	1	1	0
National Information Infrastructure (NII) Program	0	0	14	14
TOTAL:	211	241	247	6

HIGHLIGHTS OF PROGRAM CHANGES

	Base		Increase/(Decrease)	
	Permanent Positions	Amount	Permanent Positions	Amount
Salaries and Expenses				
Domestic and International Policies	27	$3,949	9	$950

An increase is requested to allow NTIA to participate in international telecommunications conferences, negotiations, and standards development forums critical to promoting U.S. global competitiveness. An increase is also requested to increase NTIA's involvement in the planning and implementation of the National Research and Education Network (NREN). These increases are investment requests contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Spectrum Management	131	$11,203	4	$875

An increase is included to achieve more efficient use of Federal frequency spectrum. NTIA will analyze current Federal frequency assignments and develop a plan to reallocate 200 MHz of Federal radio spectrum to be transferred to the FCC for assignment to the private sector by competitive bidding. This reallocation will make scarce radio spectrum available for the introduction of new technologies. This increase is an investment request contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Telecommunication Sciences Research	37	3,775	9	1,175

An increase is requested for NTIA to perform state-of-the-art telecommunications standards research related to the Administration's National Information Infrastructure Initiative. This increase is an investment request contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Public Telecommunications Facilities, Planning and Construction	15	20,636	0	0

No increases are requested for the Public Telecommunications Facilities grant program in FY 1994.

Endowment for Children's Educational Television	1	1,000	0	0

No increases are requested for the National Endowment for Children's Television in FY 1994.

National Information Infrastructure (NII) Grant Program	0	0	14	51,000

An increase is requested in FY 1994 to begin a National Information Infrastructure Grant Program as part of the Administration's Vision for Change for America. This program will award grants for the planning and construction of a high speed telecommunications information highway capable of transporting large amounts of data throughout the country. This increase is an investment request contingent upon the enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Comparison of Appropriation by Activity

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Salaries and Expenses	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Domestic and International Policies:								
Domestic policies	13	$1,910	13	$1,897	15	$2,197	2	$300
International policies	14	1,935	14	2,052	21	2,702	7	650
Subtotal	27	3,845	27	3,949	36	4,899	9	950
Spectrum Management:								
Spectrum plans and policies	22	2,237	22	2,220	26	3,095	4	875
Spectrum management, analysis & operations	109	8,926	109	8,983	109	8,983	0	0
Subtotal	131	11,163	131	11,203	135	12,078	4	875
Telecommunication Science Research:								
Spectrum research and analysis	19	1,749	19	1,815	22	2,153	3	338
Systems & networks research & analysis	18	2,072	18	1,960	24	2,797	6	837
Subtotal	37	3,821	37	3,775	46	4,950	9	1,175
TOTAL DIRECT OBLIGATIONS:	195	18,829	195	18,927	217	21,927	22	3,000
REIMBURSABLE OBLIGATIONS:	69	8,800	69	8,800	69	8,800	0	0
TOTAL OBLIGATIONS:	264	27,629	264	27,727	286	30,727	22	3,000
FINANCING:								
Offsetting collections from:								
Federal funds	(66)	(8,550)			(66)	(8,550)		
Non-federal sources	(3)	(250)			(3)	(250)		
Unobligated balance, start of year		(336)						
Subtotal, financing	(69)	(9,136)			(69)	(8,800)		
TOTAL BUDGET AUTHORITY:	195	18,493			217	21,927		
Less Transfers Implemented Pursuant to P.L. 102-395	0	(593)			0	0		
TOTAL APPROPRIATION	195	17,900			217	21,927		

Summary of Changes from 1993 Appropriation

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
Salaries and Expenses	Perm. Pos	Amount	Perm. Pos	Amount
Amount available as shown in 1994 President's Budget, 1993			195	$19,566
Less December 17 Proposed Transfers – Not Implemented (P.L. 102–395)				1,073
Amount Currently Available, 1993				18,493
Less Transfers Implemented (P.L. 102–395)				593
Appropriation, 1993				17,900
ADJUSTMENTS TO BASE:				
OTHER CHANGES:				
1993 Pay raise		$130		
Full year cost in 1994 of positions financed for part year in 1993		109		
Within–grade step increases				
Civil service retirement		(23)		
Federal employees' retirement system		43		
Thrift savings plan		7		
Federal Insurance Contributions Act (FICA) – OASDI		38		
Health insurance premium		49		
Employees' Compensation Fund		(5)		
Travel				
Per Diem		15		
Rental payments to GSA		46		
Communications, utilities and misc. charges		12		
Printing and reproduction		8		
Other services				
Working Capital Fund		(12)		
Other services		11		
Supplies and materials		6		
Continuation of FY 1993 operating level		593		
Subtotal, other changes			0	1,027
TOTAL, ADJUSTMENTS TO BASE			0	1,027
1994 base			195	18,927
Investment			22	3,000
TOTAL REQUIREMENTS			217	21,927
1994 APPROPRIATION			217	21,927

Comparison of Appropriation by Activity

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Public Telecommunications Facilities, Planning, & Construction	Perm. Pos	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos	Amount
TOTAL DIRECT OBLIGATIONS:								
Public telecommunications facilities, planning and construction	45	$21,320	15	$20,636	15	$20,636	0	$0

Summary of Changes from 1993 Appropriation

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1994 Estimate Detailed		1994 Estimate Summary	
Public Telecommunications Facilities, Planning, & Construction	Perm. Pos.	Amount	Perm. Pos.	Amount
Amount Currently Available, 1993			45	$20,254
Plus Transfers Implemented (P.L. 102–395)				1,066
Appropriation, 1993			45	21,320
ADJUSTMENTS TO BASE:				
Limits on Grant Overhead		($91)		
Transfer to S&E	(16)			
Transfer to NII	(14)			
Continuation of FY 1993 operating level		(593)		
Subtotal, other changes			(30)	(684)
TOTAL ADJUSTMENTS TO BASE:			(30)	(684)
1994 base			15	20,636
Program changes			0	0
TOTAL REQUIREMENTS			15	20,636
1994 APPROPRIATION			15	20,636

Comparison of Appropriation by Activity

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
National Endowment for Children's Educational Television	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
National Endowment for Children's Educational Television	1	$1,000	1	$1,000	1	$1,000	0	$0

Summary of Changes from 1993 Appropriation

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
National Endowment for Children's Educational Television	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			1	$1,000
1994 base			1	1,000
Program changes			0	0
TOTAL REQUIREMENTS			1	1,000
1994 APPROPRIATION			1	1,000

Comparison of Appropriation by Activity

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
National Information Infrastructure (NII) Program	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Information Infrastructure Program	0	$0	0	$0	14	$51,000	14	$51,000

Summary of Changes from 1993 Appropriation

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION	1994 Estimate			
	Detailed		Summary	
National Information Infrastructure (NII) Program	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1993			0	0
1994 base			0	0
Investment			14	$51,000
TOTAL REQUIREMENTS			14	51,000
1994 APPROPRIATION			14	51,000

BRIDGE FROM 1993 AND 1994 APPROPRIATIONS TO 1993 AND 1994 BUDGET AUTHORITY

(Dollar amounts in thousands)

	1993	1994	Change 1993 – 1994
Annual appropriations act	$3,109,237	$3,578,936	$469,699
Emergency supplemental (P.L. 102–368)	8,700	0	0
Appropriations	3,117,937	3,578,936	469,699
Transfer to "Promote and develop fishery products and research pertaining to American fisheries", NOAA	61,408	61,400	(8)
Subtotal, Federal funds	3,179,345	3,640,336	469,691
Trust funds	500	508	8
Offsetting receipts	(119,320)	(124,820)	(5,500)
BUDGET AUTHORITY, DEPARTMENT OF COMMERCE	3,060,525	3,516,024	455,499

COMPARISON OF 1994 ESTIMATE WITH 1992 AND 1993 APPROPRIATIONS ENACTED TO DATE

(Dollar amounts in thousands)

	1992 Actual		1993 Appropriation		1994 Estimate		Increase/Decrease	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
GENERAL ADMINISTRATION:								
Salaries and expenses	355	$31,280	340	$31,712	367	$38,042	27	$6,330
Office of the Inspector General	214	15,140	214	15,805	214	18,381	0	2,576
Subtotal, GA	569	46,420	554	47,517	581	56,423	27	8,906
ECONOMIC DEVELOPMENT ADMINISTRATION:								
Salaries and expenses	357	27,632	375	27,118	375	30,151	0	3,033
Econ. essistance programs	0	301,936	0	217,000	0	223,150	0	6,150
Econ. dev revolving fund	0	(3,000)	0	0	0	0	0	0
Econ. dev guaranteed loans	18	2,414	0	0	0	0	0	0
Subtotal, EDA	375	328,982	375	244,118	375	253,301	0	9,183
BUREAU OF THE CENSUS:								
Salaries end expenses	2,066	125,290	2,041	123,955	2,361	140,798	320	16,843
Periodic censuses and programs	2,149	165,000	2,655	173,300	1,880	130,918	(775)	(42,382)
Subtotal, Census	4,215	290,290	4,696	297,255	4,241	271,716	(455)	(25,539)
ECONOMIC AND STATISTICAL ANALYSIS:								
Salaries end expenses	604	40,380	601	39,353	566	49,802	(35)	10,449
INTERNATIONAL TRADE ADMINISTRATION:								
Operations and administration	2,521	209,160	2,431	213,851	2,431	246,333	0	32,482

	1992 Actual		1993 Appropriation		1994 Estimate		Increase/Decrease	
	Perm. Pos.	Amount	Perm. Pos	Amount	Perm. Pos	Amount	Perm. Pos.	Amount
BUREAU OF EXPORT ADMINISTRATION:								
Operations and administration	488	$39,450	442	$41,015	319	$34,747	(123)	($6,268)
MINORITY BUSINESS DEVELOPMENT AGENCY:								
Minority business development	216	42,500	209	37,869	209	45,381	0	7,492
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:								
Salaries and expenses	94	17,480	94	19,208	96	20,298	2	1,090
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:								
Operations, research, and facilities	11,988	1,461,999	12,257	1,526,516	12,366	1,757,672	109	231,156
Construction	21	34,917	5	94,500	5	79,063	0	(15,437)
Fishing vessel and gear damage compensation fund	4	1,281	4	1,306	4	1,335	0	29
Fishermen's contingency fund	1	1,000	1	1,025	1	1,051	0	26
Foreign fishing observer fund	3	(1,204)	5	565	5	564	0	(1)
Fishing vessels obligations guar	0	1,770	0	470	0	0	0	(470)
Federal ship financing fund	29	0	0	0	0	0	0	0
Fleet modernization, shipbuilding, and conversion	15	33,200	16	30,000	16	23,064	0	(6,936)
GOES Satellite contingency fund	0	110,000	0	0	0	0	0	0
Fisheries promotional fund	1	250	0	0	0	0	0	0
Promote and develop...fisheries	7	0	7	0	0	0	(7)	0
Subtotal, NOAA	12,069	1,643,213	12,295	1,654,382	12,397	1,862,749	102	208,367
PATENT AND TRADEMARK OFFICE:								
Salaries and expenses	5,852	86,441	5,291	86,672	5,237	103,000	(54)	16,328
TECHNOLOGY ADMINISTRATION:								
Salaries and expenses	43	4,600	43	4,450	43	5,425	0	975
NATIONAL TECHNICAL INFORMATION SERVICE:								
NTIS Revolving fund	0	0	0	6,000	0	0	0	(6,000)
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY:								
Scientific and technical research and services	1,627	183,000	1,696	192,940	2,046	240,988	350	48,048
Industrial technology services	19	63,713	91	86,067	185	232,524	94	146,457
Construction of research facilities	0	0	0	105,000	5	61,686	5	(43,314)
Subtotal, NIST	1,646	246,713	1,787	384,007	2,236	535,198	449	151,191
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION:								
Salaries and expenses	195	17,600	195	17,900	217	21,927	22	4,027
Public telecommunications facilities, planning and construction	15	19,925	45	21,320	15	20,636	(30)	(684)
Endowment for children's education television	1	2,000	1	1,000	1	1,000	0	0
Information Highways	0	0	0	0	14	51,000	14	51,000
Subtotal, NTIA	211	39,525	241	40,220	247	94,563	6	54,343
TOTAL, DEPARTMENT OF COMMERCE	28,903	3,037,154	29,059	3,117,937	28,978	3,578,936	(81)	460,999

Summary of Requirements with Detail of Adjustments to Base and Built–in Changes

(Dollar amounts in thousands)

	1994 Estimate			
	Detailed		Summary	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriations currently available, 1993			29,059	$3,117,937
ADJUSTMENTS TO BASE:				
TRANSFERS:				
From "Promote and Develop Fishery Products"			0	61,400
Inter Bureau Transfer			(20)	0
ADJUSTMENTS:				
Non–recurring items			(1,162)	(102,463)
FTE reduction			(236)	(24,000)
Administrative expenses			0	(16,818)
FINANCING:				
From recoveries of prior year obligations			0	11,800
Fees collections in 1993			0	387,000
OTHER COST CHANGES:				
Continuation of 1993 operating level	0	($4,675)		
1993 Pay raise	0	9,526		
Law Enforcement	0	91		
Full year cost in 1994 of positions financed for part year in 1993	0	8,256		
Within–grade step increases	0	16,033		
Civil Service Retirement System(CSRS)	0	(2,026)		
Federal Employees' Retirement System(FERS)	0	3,771		
Thrift Savings Plan	0	1,084		
Federal Insurance Contributions Act (FICA) –OASDI	0	2,714		
Variable housing allowance	0	169		
Health insurance	0	4,346		
Employees' Compensation Fund	0	(119)		
Retired pay	0	373		
Unemployment Compensation	0	(3,560)		
Travel:				
Per diem	0	245		
Travel adjustment	0	(851)		

	1994 Estimate			
	Detailed		Summary	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Transportation of things	0	$510		
Rental payments to GSA	0	8,615		
Rental payments to others	0	285		
Communications, utilities & misc. charges:				
Rental of Equipment	0	33		
Other Telecommunication System	0	(4,784)		
Other telephone	0	(963)		
Utilities	0	922		
Printing and reproduction	0	1,953		
Other services:				
Working Capital Fund	0	1,471		
Other services	0	(2,318)		
Supplies and materials	0	2,168		
Equipment	0	1,921		
Investments and loans	0	13		
Grants	0	620		
Insurance claims and indemnities	0	61		
Overseas wage increases	0	2,525		
Overseas price increases	0	3,295		
Adjustment of SIPP (Census S&E)	59	3,526		
BEA relocation	0	1,500		
Limit on grant overhead	0	(1,100)		
Foreign Affairs Administrative Services	0	9,109		
Restoration of FY 1993 Base Reduction	152	16,256		
Subtotal, other changes			211	$80,995
TOTAL, ADJUSTMENTS TO BASE			(1,207)	397,914
1994 Base			27,852	3,515,851
Program changes			1,126	557,977
TOTAL REQUIREMENTS			28,978	4,073,828
Fee collections			0	(415,692)
Recoveries from prior year obligations			0	(17,800)
Transfer			0	(61,400)
1994 APPROPRIATION REQUESTED			28,978	3,578,936

COMPARISON BY BUREAU OF ADJUSTMENTS TO BASE
1994 ESTIMATE AND PROGRAM CHANGES

(Dollar amounts in thousands)

	Net Adjustments To Base		1994 Base		1994 Estimate		Increase/Decrease over 1994 Base	
BUREAU	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
General Administration	6	$1,906	560	$49,423	581	$56,423	21	$7,000
Economic Development Administration	0	(13,097)	375	231,021	375	253,301	0	22,280
Bureau of the Census	(712)	(37,431)	3,984	259,824	4,241	275,716	257	15,892
Economic and Statistical Analysis	(47)	7,449	554	46,802	566	49,802	12	3,000
International Trade Administration	0	13,858	2,431	227,709	2,431	246,333		18,624
Bureau of Export Administration	(7)	191	435	41,206	319	34,747	(116)	(6,459)
Minority Business Development Agency	0	2,492	209	40,381	209	45,381		5,000
United States Travel & Tourism Administration	0	(1,410)	94	17,798	96	20,298	2	2,500
National Oceanic & Atmospheric Administration	(144)	71,829	12,151	1,726,211	12,397	1,937,949	246	211,738
Patent and Trademark Office	(285)	398,416	5,006	485,090	5,237	518,692	231	33,602
Technology Administration	0	(25)	43	4,425	43	5,425		1,000
National Technical Information Service	0	(8,000)	0	0	0	0		0
National Inst. of Standards & Technology	12	(38,609)	1,799	345,398	2,236	535,198	437	189,800
National Telecommunications and Information Administration	(30)	343	211	40,563	247	94,563	36	54,000
TOTAL REQUIREMENTS	(1,207)	397,914	27,852	3,515,851	28,978	4,073,828	1,126	557,977
Fee collections					0	(415,692)		
Recoveries from prior year obligations					0	(17,800)		
Transfers					0	(61,400)		
1994 APPROPRIATION REQUESTED					28,978	3,578,936		

AUTHORIZING LEGISLATION REQUIRED FOR FY 1994

Appropriation and activity	1993 Enacted	1994 Base	1994 Request
Economic Development Administration			
Economic Development Assistance Programs	$217,000	$203,870	$223,150
Community Economic Development Act of 1981, P.L. 97–35, expired 9/30/82.			
Bureau of the Census			
Salaries and Expenses			
Quarterly Financial Report	2,100	2,300	2,300
Census, Title 13 U.S.C., Amendment, P.L. 101–227, expires 9/30/93.			
National Oceanic and Atmospheric Administration			
Operations, research and facilities:			
National Marine Fisheries Service			
Marine Fisheries Program Authorization Act P.L. 102–567, expires 9/30/93.	84,281	86,954	87,701
Marine Mammal Protection Act Amendments of 1988, P.L. 101–711, expires 9/30/93.	20,558	20,471	21,101
Magnuson Fisheries Conservation and Management Amendments, P.L. 101–627, expires 9/30/93.	98,408	96,751	101,277
Endangered Species Act Amendments of 1988, P.L. 100–478, expired 9/30/92.	8,821	8,812	8,405
Later Transmittal Proposal:			
Marine Navigation Trust Fund	0	0	45,500
Subtotal, NOAA	212,068	212,988	263,984

Appropriation and activity	1993 Enacted	1994 Base	1994 Request
Patent and Trademark Office			
Salaries and expenses:	$86,672	$103,000	$103,000
Patent and Trademark Office Authorization Act, P.L. 102–204, expired 9/30/92.			
Technology Administration			
Salaries and expenses:			
Office of the Under Secretary, Technology Policy, Japanese Technical Literature, Clearinghouse on State and Local Initiatives on Productivity, Technology, and Innovation	4,450	4,425	5,425
The Technology Administration Act of 1991 (Sec. 103), P.L. 102–245, expires 9/30/93.			
National Institute of Standards and Technology:			
Scientific & technical research and services:	192,940	197,188	240,988
The Technology Administration Act of 1991 (Sec. 104), P.L. 102–245, expires 9/30/93.			
Industrial technology services:	86,067	86,524	232,524
The Technology Administration Act of 1991 (Sec. 104), P.L. 102–245, expires 9/30/93.			
Construction:	105,000	61,686	61,686
The Technology Administration Act of 1991 (Sec. 104), P.L. 102–245, expires 9/30/93.			
Subtotal, NIST	384,007	345,398	535,198

Appropriation and activity	1993 Enacted	1994 Base	1994 Request
National Telecommunications and Information Administration			
Salaries and expenses:	$17,900	$18,927	$21,927
Telecommunications Authorization Act of 1992, P.L. 102–538, expires 9/30/93.			
Proposed for Later Transmittal:			
National Information Infrastructure			
Authorizing Legislation for the National Information Infrastructure Grant Program	0	0	51,000
Subtotal, NTIA	17,900	18,927	72,927
TOTAL, AUTHORIZATION REQUIRED	924,197	890,908	1,205,984
PROGRAMS AUTHORIZED			2,310,040
TOTAL, DEPARTMENT OF COMMERCE			3,516,024

Budget Authority By Function

(Dollars in Thousands)

FUNCTION / PROGRAM	1992	1993 1/	1994 2/	Change 1993–1994
300 NATURAL RESOURCES AND ENVIRONMENT				
304 Pollution control and abatement				
National Oceanic and Atmospheric Administration	($4,575)	($17,506)	($1,500)	$16,006
306 Other natural resources				
National Oceanic and Atmospheric Administration	1,674,167	1,775,795	1,899,635	123,840
Total, Natural Resources and Environment	1,669,592	1,758,289	1,898,135	139,846
370 COMMERCE AND HOUSING CREDIT				
376 Other advancement and regulation of Commerce				
General Administration	46,420	47,967	56,423	8,456
Bureau of the Census	290,290	297,255	271,716	(25,539)
Economic and Statistical Analysis	40,380	46,953	49,802	2,849
International Trade Administration	209,160	213,851	246,333	32,482
Bureau of Export Administration	39,450	41,015	34,747	(6,268)
Minority Business Development Agency	42,500	39,767	45,381	5,614
United States Travel and Tourism Administration	17,480	19,208	20,298	1,090
National Oceanic and Atmospheric Administration	32,956	38,274	26,014	(12,260)
Patent and Trademark Office	88,441	86,672	103,000	16,328
Technology Administration	4,600	4,636	5,425	789
National Institute of Standards and Technology	246,713	500,160	535,198	35,038
National Technical Information Service	0	7800	0	(7,800)
National Telecommunications and Information Administration	17,600	16,493	21,927	3,434
Total, Commerce and Housing Credit	1,075,990	1,362,051	1,416,264	54,213
450 COMMUNITY AND REGIONAL DEVELOPMENT				
452 Area and regional development				
Economic Development Administration	328,982	331,727	253,301	(78,426)
Total, Community and Regional Development	328,982	331,727	253,301	(78,426)

Budget Authority By Function

(Dollars in Thousands)

FUNCTION / PROGRAM	1992	1993 1/	1994 2/	Change 1993–1994
500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES				
503 Research and general education aids:				
National Telecommunications and Information Administration	$21,925	$85,121	$72,636	($12,485)
Total, Education, Training, Employment and Social Services	21,925	85,121	72,636	(12,485)
SUBTOTAL, FEDERAL FUNDS	3,096,489	3,537,188	3,640,336	103,148
Trust funds	73,023	500	508	8
Offsetting receipts	(146,974)	(119,320)	(124,820)	(5,500)
SUBTOTAL, DEPARTMENT OF COMMERCE	3,022,538	3,418,368	3,516,024	97,656
Proposed for later transmittal:				
300 NATURAL RESOURCES AND ENVIRONMENT				
National Oceanic and Atmospheric Administration				
306 Other natural resources				
Federal Funds		0	(45,500)	(45,500)
301 Water resources				
Trust Funds		0	45,500	45,500
TOTAL, DEPARTMENT OF COMMERCE	3,022,538	3,418,368 1/	3,516,024 2/	97,656

1/ Includes the $357.843 million economic stimulus supplemental

2/ Includes the $517.865 million investment request which is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

SUMMARY OF BUDGET AUTHORITY: 1994 – 1998

(Dollar amounts in millions)

	1994	1995	1996	1997	1998
General Administration	$56	$47	$47	$45	$45
Economic Development Administration	220	228	233	237	242
Bureau of the Census	272	272	285	300	533
Economic and Statistical Analysis	50	48	49	48	47
International Trade Administration	246	218	219	212	210
Bureau of Export Administration	35	33	33	31	31
Minority Business Development Agency	45	39	39	39	39
United States Travel and Tourism Administration	20	20	21	20	21
National Oceanic and Atmospheric Administration	1,681	1,637	1,649	1,618	1,624
Patent and Trademark Office	103	107	0	0	0
Technology Administration	5	4	4	4	4
National Institute of Standards and Technology	347	385	391	390	393
National Telecommunications and Information Administration	41	41	41	41	41
SUBTOTAL, FEDERAL FUNDS	3,122	3,079	3,010	2,986	3,230
Trust funds	1	1	1	1	1
Offsetting receipts	(125)	(129)	(20)	(20)	(21)
SUBTOTAL, DEPARTMENT OF COMMERCE	2,998	2,951	2,991	2,967	3,210
INVESTMENTS					
Economic Development Administration:					
Economic development assistance programs	33	55	55	55	55
National Oceanic and Atmospheric Administration					
Operations, research, and facilities	228	159	155	129	38
Construction	15	(36)	(48)	(52)	(53)
National Institute of Standards and Technology:					
Scientific and technical research and services	37	121	177	234	258
Industrial technology services	142	431	520	754	754
Working Capital Fund	8	1	1	1	1
National Telecommunications and Information Administration:					
Salaries and expenses	3	0	0	0	0
Information infrastructure grants	51	150	150	150	150
SUBTOTAL, INVESTMENTS	518	881	1,010	1,271	1,203
Proposed for later transmittal:					
Operations, research and facilities, Federal funds	(46)	(46)	(46)	(46)	(46)
Marine Navigation Trust Fund	46	46	46	46	48
TOTAL, DEPARTMENT OF COMMERCE	3,516	3,832	4,001	4,238	4,413

SUMMARY OF OUTLAYS: 1994 – 1998

(Dollar amounts in millions)

	1994	1995	1996	1997	1998
General Administration	$58	$47	$47	$45	$45
Economic Development Administration	276	340	327	300	234
Bureau of the Census	272	280	272	280	461
Economic and Statistical Analysis	50	48	49	48	47
International Trade Administration	233	224	221	214	212
Bureau of Export Administration	35	33	33	31	31
Minority Business Development Agency	49	42	39	39	39
United States Travel and Tourism Administration	21	20	21	20	21
National Oceanic and Atmospheric Administration	1,665	1,602	1,598	1,633	1,626
Patent and Trademark Office	102	105	0	0	0
Technology Administration	5	5	4	4	4
National Institute of Standards and Technology	321	344	376	381	398
National Telecommunications and Information Administration.	77	75	41	41	41
SUBTOTAL, FEDERAL FUNDS	3,164	3,165	3,027	3,035	3,178
Trust funds	1	1	1	1	1
Offsetting receipts	(125)	(129)	(20)	(20)	(21)
TOTAL, DEPARTMENT OF COMMERCE	3,040	3,037	3,008	3,016	3,158
INVESTMENTS					
Economic Development Administration:					
Economic development assistance programs	3	16	34	46	52
National Oceanic and Atmospheric Administration:					
Operations, research, and facilities	132	156	151	145	80
Construction	2	3	(27)	(46)	(51)
National Institute of Standards and Technology:					
Scientific and technical research and services	29	102	164	220	252
Industrial technology services	45	181	332	525	654
Working Capital Fund	4	5	1	1	1
National Telecommunications and Information Administration:					
Salaries and expenses	3	0	0	0	0
Information infrastructure grants	1	42	101	129	150
SUBTOTAL, INVESTMENTS	219	505	756	1,020	1,138
Proposed for later transmittal:					
National Oceanic and Atmospheric Administration					
Operations, research and facilities, Federal funds	(46)	(46)	(46)	(46)	(46)
Marine Navigation Trust Fund	46	46	46	46	46
TOTAL, DEPARTMENT OF COMMERCE	3,259	3,542	3,764	4,036	4,296

NOTE: Detail may not add due to rounding

GLOSSARY OF TERMS

Budget Authority

Budget authority for any year represents the authority to incur obligations, requiring either immediate or future payment, which will become available during the year. Appropriations on which the Congress acts are the most common form of budget authority, allowing Federal agencies to make payments out of the Treasury for specified purposes.

Federal Funds

Funds collected and used by the Federal Government for the general purposes of the Government. There are four types of Federal fund accounts: the general fund, special funds, public enterprise (revolving) funds, and intra–governmental funds. The primary Federal funds type is the general fund, derived from general taxes and borrowing.

Full–time Equivalent (Workyears) Employment

Compensable workyears for all Federal personnel, calculated by dividing the total number of hours (worked or to be worked) by the number of compensable hours applicable to each fiscal year (8 x the number of compensable days in each fiscal year). For a fiscal year with 260 days, the divisor is 2080, for 261 days, 2088; for 262 days, 2096.

Offsetting Receipts

Collections deposited in receipt accounts that are offset against budget authority and outlays rather than being counted as budget receipts. These collections are derived from other Government accounts or from Government activities that are of a business–type or market–orientated nature.

Outlays

Obligations incurred under budget authority are generally liquidated by the issuance of checks by the Treasury. Such payments are called outlays. Outlays during any fiscal year may be payments of obligations incurred in prior fiscal years or in the same fiscal year.

Permanent Positions

Permanent positions are funded positions which are occupied or expected to be occupied by full–time employees with permanent appointments as of September 30 of each year.

Supplemental Appropriation

An act appropriating funds in addition to those in an annual appropriation act. Supplemental appropriations provide additional budget authority beyond original estimates for programs or activities (including new programs authorized after the date of the original appropriation act) for which the need for funds is too urgent to be postponed until enactment of the next regular appropriation act.

Trust Funds

Funds collected and used by the Federal Government for carrying out specified purposes and programs according to terms of a trust agreement or statute, such as the social security and unemployment trust funds. Trust funds are not available for the general purposes of the Government.

GENERAL STATEMENT

Mr. SMITH. Here to testify is the Honorable Ronald H. Brown, the new Secretary of Commerce. Secretary Brown, we will insert your biographical sketch into the record at this point, and you may proceed with your oral statement.

[The information follows:]

RONALD H. BROWN

In naming Ronald H. Brown as Secretary of Commerce, President Bill Clinton said he was appointing someone who could make the Department a "powerhouse."

The President noted that Ron Brown "has had a distinguished career as a lawyer. He's been the chief counsel of the Judiciary Committee of the Senate. He's been a prominent civil rights leader. He's worked 11 years at the Urban League. He has been a brilliant negotiator and perhaps the most outstanding chairman of the Democratic National Committee in my lifetime."

Secretary Brown was born in Washington, D.C., in 1941 and was raised in Harlem, New York, where his father, William, managed Harlem's Theresa Hotel.

With the help of a scholarship, he attended Middlebury College in Vermont where he was the only African American in his class, and the first to break the color line at a previously all-white fraternity.

Secretary Brown's first job after college was as a welfare caseworker for the City of New York. Newly married to Alma Arrington, he also attended law school at night, at St. John's University, where he met professor—and later friend and mentor—Mario Cuomo.

After a four-year Army tour in Germany and Korea, Secretary Brown began a distinguished professional career with the National Urban League. For the next twelve years he served as Deputy Executive Director, General Counsel, and Vice President for the Urban League's Washington operations, fighting to bring to others equal rights and the opportunity he has enjoyed. Jobs, education, and innovation have been a cornerstone of Ron Brown's economic vision for almost three decades.

In 1979, Mr. Brown became Deputy National Campaign Manager for Senator Edward M. Kennedy, and later served as Staff Director in the office of Senator Kennedy, working for health care reform and job creation. Brown also served as Chief Counsel for the Senate Judiciary Committee.

In 1981, Brown became a partner in the Washington, D.C. law firm of Patton, Boggs, and Blow. He is a member of the New York Bar, the District of Columbia Bar, and the United States Supreme Court Bar.

Secretary Brown, who began his service to the Democratic Party in 1971 as a Mt. Vernon New York District Leader, served as the Democratic National Committee's (DNC) Chief counsel and Deputy Chair, and Chaired the Task Force on Voter Rights and Voter Participation before seeking the Office of Chairman. In 1988, he worked to unify a splintered Democratic Party, first as Convention Manager for the Reverend Jesse L. Jackson and later as a senior political advisor to the Dukakis-Bentsen general election effort. He was elected Chairman of the DNC in February 1989.

Secretary and Mrs. Brown have a son, Michael, 27, and a daughter, Tracy 25, both lawyers.

Secretary BROWN. Thank you very much, Mr. Chairman, Mr. Rogers, and members of the committee. It is a pleasure for me to appear before you this morning to present the Department of Commerce's fiscal year 1994 budget request.

Let me take a moment to introduce those from the Department of Commerce who are accompanying me this morning. To my immediate right is Mark Brown, the Director of the Office of Budget. Also with me is Alan Balutis, Director for Budget, Planning, and Organization.

Jonathan Sallet, who is going to be directing the Office of Policy and Strategy at the Department of Commerce; John Lyons, the Acting Under Secretary for Technology; Tom Sugrue, the Acting Assistant Secretary for Communications and Information; Diana Josephson, Deputy Under Secretary for Oceans and Atmosphere;

Timothy J. Hauser, the Acting Under Secretary for the International Trade Administration; and Ray Kammer, the Acting Director for the National Institute of Standards and Technology.

This is part of the excellent staff that we are assembling. Some of those who are with me today are career employees; others are those that we will be bringing to the Commerce Department as presidential appointees.

Last November, when the American people chose Bill Clinton to be their President, they did so because of a clear desire for positive and constructive change in America.

This Administration has made its mission clear. We must change the course and direction of our economy. We must focus on long-term economic growth and opportunity. We must build a new public and private partnership. That is, we must redefine the relationship between government and the private sector. We must open new opportunities so that we might realize our commitment to truly putting people first.

In the past dozen years, there have been fundamental changes in the global economy, but our own economy, in my judgment, has not kept pace with those changes.

The Department of Commerce's uniquely private-sector-related programs can help realize the priority goals of the President in a number of areas. These areas include trade, technology, telecommunications networks and infrastructure, environmental infrastructure, economic development and minority business.

OVERVIEW OF COMMERCE BUDGET

The Commerce Department's request for fiscal year 1994 is $3.515 billion. Our themes in this budget are very simple and direct ones: first, to stimulate our economy and provide for long-term growth and investment, to cut administrative and personnel costs and to add resources for programs which are critical to our Nation's future well-being.

Let me now address the main themes of our fiscal year 1994 budget request. Those themes are stimulus, investment and savings.

I appeared before you on February 23rd to discuss our Department's fiscal year 1993 supplemental budget request of $358 million, funding that will be spent this year. We will use that funding to create private sector science- and technology-oriented manufacturing and research and development jobs, to fund the Commerce portions of a Nation-wide information highway, and to aid local businesses in rebuilding of economically distressed areas.

Our 1994 request includes funding to continue Commerce stimulus investments. The Economic Development Administration will be the cornerstone for us in areas that have been hard hit by the closing of military installations or the loss of major military contracts.

The Economic Development Administration programs have suffered over the last 12 years through many attempts to eliminate them. Those attempts for elimination were thwarted by this committee and by the Congress which restored funding. We will seek authorizing legislation for fiscal year 1994.

Under the defense conversion initiative, EDA requests $33 million to help find alternative uses for military and other facilities. When defense contracts are lost, we are taking steps to ensure that the base closings, announced by Secretary Aspin on March 12th, will be included in EDA's planning.

The Minority Business Development Agency can play an effective role in stimulating minority business. We ask for your support in rebuilding MBDA and in funding the Mega Center Program.

The Department of Commerce must play a lead role in building the future of the Nation through long-term investment and the close cooperation of business and government. Next year, we are requesting funds to continue pursuing several successful technology initiatives.

The Advanced Technology Program has great promise for the future. During a recent visit to New York, I saw examples of existing progress and exciting new ways of reaching the private sector, such as advanced software for analyzing the global environment. I saw students developing software to improve microchip design and learning skills which will serve them well into the 21st century, demonstrations of new materials such as a two-by-four made exclusively from recycled plastics and a day care center teaching both computer literacy and educational content.

Technological advances have led to two-thirds of the Nation's productivity gains over the last 60 years. In Commerce, this leads to two major investment goals: We will support the development, commercialization and application of new technology which can help American firms to excel in the face of stiff foreign competition. We will support changes in our trade and procurement policies in order to establish a more fertile environment for innovation and investment.

For NIST, we are requesting increases of $132 million in the ATP program, $12 million in the Manufacturing Extension Partnership Program, $13 million for NIST core research to strengthen our technology base, and $6.8 million for Federal Coordinating Council on Science, Engineering and Technology activities.

Additionally, as the President announced in Baltimore on March 11th, NIST, the Department of Energy, the National Science Foundation and NASA are working with DARPA to develop a coordinated, technologically-oriented defense conversion program. Although programmatic details have not yet been finalized, NIST is expected to administer up to $125 million in DOD funding for manufacturing conversion and extension programs.

One of the main underpinnings of the President's long-term economic plan is building infrastructure. Part of the fiscal year 1994 NIST request does exactly that.

NIST's aging labs in Boulder, Colorado, and Gaithersburg, Maryland, are losing their ability to conduct the research necessary to maintain our Nation's preeminent position. The fiscal year 1994 request includes $62 million for construction and modernization of these facilities.

The request also includes $24 million for continued work supporting the network that is being developed along with the National Science Foundation, NIH and NASA. NIST will NTIA also work with these agencies to ensure that the best possible results from this high performance computing and communications effort are reached.

NOAA's weather service modernization program is another example of the President's commitment to a long-term investment strategy. The National Weather Service will be a more automated and less labor-intensive operation when this is completed. Next year, we request an increase of $217 million to continue developing and procuring weather satellites and new weather detection technologies and facilities.

The National Telecommunications and Information Administration conducts its own cutting-edge research as well as providing grants for the construction of public telecommunications facilities. Next year, NTIA will, first and foremost, continue to support the development of a high-speed information infrastructure for our Nation established through the FY 1993 economic stimulus supplemental; will participate in critical international negotiations addressing telecommunications standards and radio spectrum allocations; will address policy and technical issues involved in implementing the National Research and Education Network; and will undertake research and analysis to develop, test and evaluate network-based performance standards.

NTIA requests an increase of $54 million as well as new authorizing legislation for extending coverage of information highway efforts to hospitals and noneducational facilities.

The technology of statistics can also get out of date, even obsolete. Therefore, we are requesting $3.8 million to plan and improve the next decennial census, $7 million for a project to improve census maps and address lists and data processing facilities and $6.5 million in Census and the Bureau of Economic Analysis to undertake a number of new initiatives.

Our data are weakest in precisely those areas where economic change has been most dynamic. These are areas such as technological innovation in the service sector and trade.

Although improving technology will command a great deal of our attention over the next several years, trade responsibilities remain a high priority for our Department. Commerce is the lead agency in export promotion.

The Department will continue to provide policy support to the United States Trade Representative to ensure completion of the negotiations on the Uruguay Round of GATT and the supplemental agreements of NAFTA before submitting implementing legislation to the Congress. In fiscal year 1994, Commerce will undertake an extensive outreach program to educate the business community on the impact of these agreements.

We will continue to support market reforms in the Newly Independent States of the former Soviet Union and expand export opportunities for U.S. firms. We are requesting an increase of $8.1 million for these efforts.

The Department will continue to expand programs funded in 1993 using resources of the Agency for International Development. These include funding three additional consortia of American businesses in the Newly Independent States. They also include continuing the special American Business Internship Program, an exchange program for United States and Russian businessmen and women and scientists, support for the United States-Russia Business Development Committee as it works to overcome obstacles to trade in the Newly Independent States.

And, as you know, Mr. Chairman, I serve along with Deputy Prime Minister Shokhin of the Soviet Union as co-Chairman of the U.S.-Russia Business Development Committee. We plan to have a meeting of that Committee sometime this spring, probably in Russia.

Continuing to provide counseling services through the Newly Independent States Business Information Center will also be a focus of these resources.

Clearly, one of the most effective ways we have to increase economic growth is by increasing our exports. When you look at the economic performance of our country over the last several years, it seems abundantly clear that one of the only bright spots has been exports, and that is why we want to focus on increasing exports, and we want to do it by providing assistance not only to large firms who are already in the export business but to small- and medium-sized firms who need to be about the business of increasing exports and thereby increasing job opportunities for the American people.

International travel is America's largest business service export, and the programs of the United States Travel and Tourism Administration contribute to the continued growth of this export. Recent USTTA authorizing legislation calls for increased assistance to states, cities and nonprofit organizations for the development of cooperative tourism marketing programs. We are requesting $2.5 million to start these programs this year.

Strong and sustained growth of the minority business segment of our economy is a goal of the Minority Business Development Agency. MBDA's programs are in a unique position to support that goal and to ensure that new businesses are able to make long-term contributions to our Nation's economy. For this reason, we are requesting an additional funding of $5 million for these efforts.

That leads me to the third theme of our fiscal year 1994 request and one that is often difficult to implement but which we are committed to implementing. We clearly need to scale back on the costs of government. We need to do that wherever possible. I want to make sure that government is providing essential services required at the lowest possible burden to the taxpayers of America. While doing that, we have to make government user-friendly, for a change, so that those who pick up the phone and call us, those who come to see us, feel that they have a friend at the end of the phone or on the other side of the door that can really help them overcome some of the problems they encounter.

I am taking to heart the theme that the President has sounded. We all must tighten our belts if the Nation's economy is to get going and to get back on track.

Next year Commerce is taking across-the-board cuts totaling $88 million, including foregoing the 1994 pay raise, personnel savings from a 2.5 percent reduction in employment through 1994, and administrative savings in travel, consulting and communications costs.

We are eliminating low priority programs and projects and those demonstrations that have been completed and do not need further attention. We are reducing by $36.7 million those allocations for the Census Bureau due to the post-1990 downward cycle in the needs of that Bureau, and reducing the Bureau of Export Administration by $6 million due to a reduced workload. I might add, even though the workload is reduced, these export issues are more complex and more difficult than ever before.

We are also eliminating trade adjustment assistance in the form of the Trade Adjustment Assistance Program. I know that this works a hardship in some areas. We feel that we can merge those efforts with other efforts that are going on in the Commerce Department and in the Small Business Administration without any loss of effectiveness or service.

Commerce has additional ways of saving funds or raising revenues. For example, the Administration is proposing that NTIA transfer a portion of the Federal radio spectrum to the FCC for auction to the private sector. This will produce, we estimate, about $4.4 billion in revenues for the United States Treasury over the period of 1994 through 1998.

We will also be seeking authority for the Patent and Trademark Office to incorporate the patent fee surcharge into regular fee rates, and this will yield over $100 million a year.

Mr. Chairman and members of the committee, this concludes my formal testimony on our fiscal year 1994 budget request. The release of the President's budget documents will be on April 5th, and our Commerce justifications will be presented at that time as well. I, of course, will be pleased to respond to any questions from you, Mr. Chairman, or from members of the committee.

[The prepared statement of Secretary Brown follows:]

PREPARED STATEMENT BY RONALD H. BROWN
SECRETARY OF COMMERCE

BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND
RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
MARCH 23, 1993

MR. CHAIRMAN, MR. ROGERS, AND MEMBERS OF THE SUBCOMMITTEE, I AM PLEASED TO APPEAR BEFORE YOU TO PRESENT THE COMMERCE DEPARTMENT'S BUDGET REQUEST FOR FY 1994.

LAST NOVEMBER, WHEN THE AMERICAN PEOPLE CHOSE BILL CLINTON TO BE THEIR PRESIDENT, THEY DID SO OUT OF A VERY CLEAR DESIRE FOR POSITIVE CHANGE. BILL CLINTON AND AL GORE REPRESENT A NEW GENERATION OF MEN AND WOMEN WHO ARE NOW COMING INTO POSITIONS OF RESPONSIBILITY IN THIS COUNTRY, WITH NEW IDEAS FOR THE FUTURE AND NEW PRIORITIES FOR MANY FEDERAL PROGRAMS.

THIS ADMINISTRATION HAS MADE ITS MISSION CLEAR -- WE MUST CHANGE THE NATURE AND THE RECENT COURSE OF OUR ECONOMY. WE MUST FOCUS ON LONG-TERM GROWTH AND OPPORTUNITY. WE MUST BUILD PUBLIC-PRIVATE PARTNERSHIPS THAT CAN FIND AND DEVELOP NEW BUSINESS AND TRADE OPPORTUNITIES. WE MUST OPEN THESE NEW OPPORTUNITIES SO THAT WE MAY REALIZE OUR COMMITMENT TO "PUT PEOPLE FIRST". WE WANT TO PROVIDE A REINVIGORATED ECONOMY AND THE JOBS THAT IT WILL PRODUCE.

IN THE PAST DOZEN YEARS, THERE HAVE BEEN FUNDAMENTAL CHANGES IN THE GLOBAL ECONOMY, BUT OUR OWN ECONOMY HAS NOT KEPT UP WITH THOSE CHANGES. OUR ABILITY TO MASTER TECHNOLOGICAL CHANGE, STAY AT THE FOREFRONT OF ONGOING DEVELOPMENT, AND APPLY IT TO OUR OWN WAY OF DOING THINGS, HAS BEEN ERODING. I AGREE FULLY WITH THE PRESIDENT AND VICE-PRESIDENT ABOUT THE NEED FOR US TO REGAIN OUR POSITION OF WORLD TECHNOLOGICAL LEADERSHIP. I WANT TO TELL YOU TODAY HOW COMMERCE WILL BE TAKING THE INITIATIVE IN MOVING OUR NATION FORWARD IN THE TECHNOLOGICAL WORLD. THE DEPARTMENT OF COMMERCE'S UNIQUELY BUSINESS RELATED PROGRAMS CAN HELP REALIZE THE PRIORITY GOALS OF THE PRESIDENT IN THE AREAS OF:

- TRADE
- TECHNOLOGY
- TELECOMMUNICATIONS NETWORKS AND INFRASTRUCTURE
- ENVIRONMENTAL INFRASTRUCTURE
- ECONOMIC DEVELOPMENT
- MINORITY BUSINESS

THE COMMERCE DEPARTMENT'S REQUEST FOR FY 1994 IS $3.515 BILLION, $455 MILLION MORE THAN THE FY 1993 LEVEL OF $3.06 BILLION. OUR THEMES IN THIS FY 1994 BUDGET ARE VERY SIMPLE ONES:

- o WE WANT TO STIMULATE THE ECONOMY AND PROVIDE FOR LONG TERM GROWTH AND INVESTMENT.
- o AT THE SAME TIME, WE WANT TO HOLD BACK ON FEDERAL ADMINISTRATIVE AND PERSONNEL COSTS.
- o IN DOING THIS, COMMERCE FACES A DELICATE BALANCING ACT -- ADDING RESOURCES TO PROGRAMS WHICH ARE CRITICAL TO OUR NATION'S FUTURE WELL-BEING, WHILE CUTTING BACK IN ADMINISTRATIVE SUPPORT IN WAYS WHICH WILL NOT HARM THAT PROGRESS.
- o I HAVE HAD TO MAKE SOME TOUGH CHOICES AND NOT ALL OF THESE PROGRAMS CAN BE CONTINUED.

LET ME NOW ADDRESS THE MAIN THEMES OF OUR OVERALL BUDGET REQUEST -- STIMULUS, INVESTMENT, AND SAVINGS.

I APPEARED BEFORE YOU ON FEBRUARY 23 TO DISCUSS OUR DEPARTMENT'S FY 1993 SUPPLEMENTAL BUDGET REQUEST OF $358 MILLION, FUNDING THAT WILL BE SPENT THIS YEAR:

- o TO CREATE JOBS IN PRIVATE SECTOR SCIENCE- AND TECHNOLOGY-ORIENTED MANUFACTURING COMPANIES AND UNIVERSITIES, AND IN RESEARCH LABORATORIES ACROSS THE COUNTRY;
- o FOR THE COMMERCE PORTIONS OF A NATION-WIDE "INFORMATION HIGHWAY" AND FOR STATE AND LOCAL EFFORTS AT PLANNING FOR OTHER PORTIONS OF IT;
- o TO AID LOCAL BUSINESSES IN COMPLETING THE REBUILDING OF ECONOMICALLY DISTRESSED AREAS.

MY FY 1994 REQUEST INCLUDES FUNDING TO CONTINUE COMMERCE INVESTMENTS THAT WILL WIDEN OPPORTUNITIES FOR THE PEOPLE OF THIS COUNTRY:

- o THE ECONOMIC DEVELOPMENT ADMINISTRATION WILL BE A CORNERSTONE FOR US, ESPECIALLY IN AREAS THAT HAVE BEEN HIT HARD BY THE CLOSING OF MILITARY INSTALLATIONS OR THE LOSS OF MILITARY CONTRACTS THAT WERE THE ECONOMIC

LIFEBLOOD OF THE AREA. THESE COMMUNITIES HAVE SUFFERED MORE THAN AREAS WHICH HAD A VARIED EMPLOYMENT BASE.

- THE EDA PROGRAMS HAVE SUFFERED IN THE LAST 12 YEARS, AS THE REAGAN-BUSH ADMINISTRATIONS TRIED REPEATEDLY TO ELIMINATE THEM. EDA IS SO VITAL IN MANY PARTS OF THIS COUNTRY THAT THE CONGRESS REPEATEDLY RESTORED FUNDING FOR IT. I'M PLEASED TO SAY THAT FOR THE FIRST TIME IN 12 YEARS, EDA IS INCLUDED IN THE DEPARTMENT'S BUDGET REQUEST. WE WILL LOOK TO EDA TO HELP COMMUNITIES CREATE JOBS IN ECONOMICALLY DISTRESSED AREAS AND WE WILL SEEK AUTHORIZING LEGISLATION FOR FY 1994.
- UNDER THE DEFENSE CONVERSION INITIATIVE, EDA REQUESTS $33 MILLION TO HELP DISTRESSED AREAS FIND ALTERNATIVE USES FOR MILITARY FACILITIES AND OTHER JOBS WHEN DEFENSE CONTRACTS ARE LOST. OUR GOAL WILL BE TO RETURN THE AREA TO A SELF-SUSTAINING FOOTING. WE ARE TAKING STEPS TO ENSURE THAT THE COMMUNITIES AFFECTED BY THE MILITARY BASE CLOSINGS ANNOUNCED BY SECRETARY ASPIN ON MARCH 12 WILL BE INCLUDED IN EDA'S PLANNING.
- I BELIEVE THAT MBDA CAN PLAY AN EFFECTIVE ROLE IN STIMULATING MINORITY BUSINESSES. I ASK FOR YOUR SUPPORT AS WE GO ABOUT REBUILDING MBDA. IN PARTICULAR, I HOPE YOU WILL HELP US BY APPROVING FUNDING FOR THE MEGA CENTER PROGRAM.

THE DEPARTMENT OF COMMERCE MUST PLAY A PART IN BUILDING THE FUTURE OF THE NATION THROUGH LONG-TERM INVESTMENT AND THE CLOSE COOPERATION OF BUSINESS AND GOVERNMENT. NEXT YEAR, I'M REQUESTING FUNDS TO CONTINUE PURSUING SEVERAL TECHNOLOGY INITIATIVES THAT HAVE ALREADY PROVEN SUCCESSFUL.

- COMMERCE'S SMALL SIZE AS COMPARED TO OTHER CABINET AGENCIES SOMETIMES HIDES OUR VERY SIGNIFICANT TECHNOLOGICAL ROLE FROM THE PUBLIC. I WANT VERY MUCH TO CHANGE THAT, AND TO REMIND THE CONGRESS AND THE AMERICAN PUBLIC OF OUR EXCELLENT PROGRAMS.
- THE TECHNOLOGY ADMINISTRATION PLAYS AN IMPORTANT LEADERSHIP ROLE IN ACHIEVING THE GOALS OF THE ADMINISTRATION'S INTERGOVERNMENTAL TECHNOLOGY POLICY AND PROGRAM OBJECTIVES, PARTICULARLY IN COMMERCIALIZATION OF R&D AND PROMOTION OF A MORE COMPETITIVE MANUFACTURING SECTOR IN OUR NATION.

- THROUGH OUR ADVANCED TECHNOLOGY PROGRAM (ATP), OUR PROGRAMS THAT LINK FEDERAL RESEARCH AND PRIVATE INDUSTRY, OUR MANUFACTURING OUTREACH EFFORTS, AND OUR PARTICIPATION IN R&D CONSORTIA, WE PLAY A VITAL ROLE IN FEDERAL SCIENCE AND TECHNOLOGY.

- LET ME DISCUSS THE ATP PROGRAM FOR A MOMENT. I'VE SEEN IT AT WORK, AND I BELIEVE THAT THIS PROGRAM HOLDS GREAT PROMISE FOR THE FUTURE. DURING A RECENT VISIT TO AN ATP GRANTEE IN BROOKLYN, I SAW WORK BEING DONE ON ENVIRONMENTAL TECHNOLOGY, ON MANUFACTURING TECHNOLOGY, AND IN THE AREA OF TELECOMMUNICATIONS:

    - ADVANCED SOFTWARE BEING USED TO ANALYZE GLOBAL ENVIRONMENTAL CONDITIONS;

    - STUDENTS DEVELOPING SOFTWARE TO IMPROVE MICROCHIP DESIGN, AND LEARNING SKILLS THAT WILL TAKE THEM INTO THE NEXT CENTURY;

    - A FACULTY MEMBER DEMONSTRATING A BOARD MADE OF RECYCLED PLASTICS, THUS COMBINING CONCERNS FOR ENVIRONMENTAL PROTECTION WITH TECHNOLOGY AND TRADE, AND;

    - A DAY-CARE CENTER USING AUTOMATED TECHNOLOGIES TO TEACH CHILDREN BOTH COMPUTER LITERACY AND EDUCATIONAL CONTENT.

- TECHNOLOGICAL ADVANCES HAVE LED TO TWO-THIRDS OF THE NATION'S PRODUCTIVITY GAINS OVER THE LAST 60 YEARS. IN COMMERCE, THIS LEADS TO TWO MAJOR INVESTMENT GOALS:

    - WE WILL SUPPORT THE DEVELOPMENT, COMMERCIALIZATION, AND APPLICATION OF NEW TECHNOLOGY THAT CAN HELP AMERICAN FIRMS EXCEL IN THE FACE OF STIFF FOREIGN COMPETITION.

    - WE WILL SUPPORT CHANGES IN OUR TRADE AND PROCUREMENT POLICIES IN ORDER TO ESTABLISH A MORE FERTILE ENVIRONMENT FOR INNOVATION AND INVESTMENT.

- FOR NIST, I AM REQUESTING INCREASES OF $132 MILLION IN ATP, $12 MILLION IN THE MANUFACTURING EXTENSION PARTNERSHIP (MEP) PROGRAM, $13 MILLION FOR NIST CORE RESEARCH TO STRENGTHEN OUR TECHNOLOGY BASE, AND $6.8 MILLION FOR

FEDERAL COORDINATING COUNCIL ON SCIENCE, ENGINEERING AND TECHNOLOGY (FCCSET) ACTIVITIES.

- ADDITIONALLY, AS THE PRESIDENT ANNOUNCED IN BALTIMORE ON MARCH 12, NIST, DOE, NSF, AND NASA ARE WORKING WITH ARPA TO DEVELOP A COORDINATED TECHNOLOGICALLY-ORIENTED DEFENSE CONVERSION PROGRAM. ALTHOUGH PROGRAMMATIC DETAILS HAVE NOT YET BEEN FINALIZED, NIST IS EXPECTED TO ADMINISTER UP TO $125 MILLION IN DOD FUNDING FOR MANUFACTURING CONVERSION/EXTENSION PROGRAMS AND TO PERMIT TECHNOLOGY DEVELOPMENT. THIS APPROACH WILL CAPITALIZE ON PREVIOUS INVESTMENTS MADE BY NIST TO DEVELOP THE ADMINISTRATIVE STRUCTURE FOR THE MEP.

ONE OF THE MAIN UNDERPINNINGS OF THE PRESIDENT'S LONG-TERM INVESTMENT ECONOMIC PLAN IS BUILDING INFRASTRUCTURE. PART OF THE FY 1994 NIST REQUEST DOES JUST THAT.

- NIST'S LABS IN BOULDER, COLORADO, AND GAITHERSBURG, MARYLAND, WERE STATE-OF-THE-ART FACILITIES WHEN FIRST OPENED, BUT, OVER TIME, THEIR ABILITY TO CONDUCT THE RESEARCH NECESSARY TO MAINTAIN OUR NATION'S PRE-EMINENT POSITION HAS ERODED. THE FY 1994 REQUEST INCLUDES $62 MILLION FOR CONSTRUCTION AND MODERNIZATION OF THESE FACILITIES.

- IN ADDITION, THE REQUEST INCLUDES $24 MILLION FOR CONTINUED WORK SUPPORTING THE NETWORK THAT IS BEING DEVELOPED ALONG WITH THE NATIONAL SCIENCE FOUNDATION, THE NATIONAL INSTITUTES OF HEALTH, AND NASA. NIST WILL WORK WITH THESE AGENCIES TO ENSURE THE BEST POSSIBLE RESULTS FROM THIS HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS EFFORT.

NOAA'S WEATHER SERVICE MODERNIZATION PROGRAM IS ANOTHER EXAMPLE OF THE PRESIDENT'S COMMITMENT TO A LONG-TERM INVESTMENT STRATEGY.

- MODERNIZATION HOLDS THE PROMISE OF BETTER INFORMATION AT REDUCED LONG-TERM COST. THE NWS WILL BE A MORE AUTOMATED AND LESS LABOR-INTENSIVE OPERATION. IN FY 1994 WE REQUEST AN INCREASE OF $217 MILLION TO CONTINUE DEVELOPING AND PROCURING WEATHER SATELLITES AND NEW WEATHER DETECTION TECHNOLOGIES, AND TO IMPLEMENT THE WORKFORCE TRANSITION. OUR REQUEST FOR FY 1994 REPRESENTS THE HIGH WATER MARK OF FUNDING REQUIREMENTS FOR THIS IMPORTANT PROGRAM.

THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA) CONDUCTS ITS OWN CUTTING-EDGE RESEARCH AS WELL AS PROVIDING GRANTS FOR THE CONSTRUCTION OF PUBLIC TELECOMMUNICATION FACILITIES. NEXT YEAR, NTIA WILL:

- CONTINUE SUPPORT FOR THE DEVELOPMENT OF A ROBUST, HIGH SPEED INFORMATION INFRASTRUCTURE FOR THE NATION;
- PARTICIPATE IN CRITICAL INTERNATIONAL CONFERENCES/ NEGOTIATIONS ADDRESSING TELECOMMUNICATIONS STANDARDS AND RADIO SPECTRUM ALLOCATIONS;
- WORK TO ADDRESS POLICY AND TECHNICAL ISSUES INVOLVED IN IMPLEMENTING THE NATIONAL RESEARCH AND EDUCATION NETWORK (NREN), AND;
- UNDERTAKE RESEARCH AND ANALYSIS TO DEVELOP, TEST, AND EVALUATE NETWORK-BASED PERFORMANCE STANDARDS.

NTIA REQUESTS AN INCREASE OF $54 MILLION FOR THE YEAR'S ACTIVITIES. NEW AUTHORIZING LEGISLATION FOR OUR INFORMATION HIGHWAYS EFFORTS WILL EXTEND ITS COVERAGE BEYOND EDUCATIONAL AND CULTURALLY-RELATED PROJECTS, TO INCLUDE CONNECTIONS FOR HOSPITALS AND NON-EDUCATIONAL ENTITIES.

THE "TECHNOLOGY" OF STATISTICS CAN ALSO GET OUT OF DATE.

- I HAVE REQUESTED AN INCREASE OF $3.8 MILLION TO PLAN FOR AND IMPROVE THE NEXT DECENNIAL CENSUS AND $7 MILLION FOR A PROJECT TO IMPROVE CENSUS MAPS AND ADDRESS LISTS AND DATA PROCESSING FACILITIES.
- BOTH THE CURRENT AND IMMEDIATE PAST CHAIRS OF THE COUNCIL ON ECONOMIC ADVISORS HAVE POINTED OUT THE NEED TO CHANGE WHAT AND HOW WE MEASURE ACTIVITY IN THE ECONOMY. FORTUNE MAGAZINE RECENTLY CALLED THIS THE "BIGGEST INFRASTRUCTURE PROBLEM OF ALL."
- WE ARE ASKING FOR $6.5 MILLION IN CENSUS AND THE BUREAU OF ECONOMIC ANALYSIS TO UNDERTAKE A NUMBER OF INITIATIVES. OUR DATA ARE WEAKEST IN PRECISELY THOSE AREAS WHERE ECONOMIC CHANGE HAS BEEN MOST DYNAMIC, SUCH AS TECHNOLOGICAL INNOVATION, THE SERVICE SECTOR, AND TRADE.

ALTHOUGH IMPROVING TECHNOLOGY WILL COMMAND A GREAT DEAL OF OUR ATTENTION OVER THE NEXT FEW YEARS, TRADE RESPONSIBILITIES REMAIN A HIGH PRIORITY FOR THE DEPARTMENT. COMMERCE IS THE LEAD AGENCY IN EXPORT PROMOTION.

- THE DEPARTMENT WILL CONTINUE TO PROVIDE POLICY SUPPORT TO THE U.S. TRADE REPRESENTATIVE TO ENSURE COMPLETION OF THE NEGOTIATIONS ON THE URUGUAY ROUND OF GATT AND THE SUPPLEMENTAL AGREEMENTS TO NAFTA, BEFORE SUBMITTING IMPLEMENTING LEGISLATION. IN FY 1994, COMMERCE WILL UNDERTAKE AN EXTENSIVE OUTREACH PROGRAM TO EDUCATE THE U.S. BUSINESS COMMUNITY ON THE IMPACT OF THESE AGREEMENTS.

- TO CONTINUE TO SUPPORT MARKET REFORMS IN THE NEWLY INDEPENDENT STATES (NIS) OF THE FORMER SOVIET UNION AND EXPAND EXPORT OPPORTUNITIES FOR U.S. FIRMS, I AM REQUESTING AN INCREASE OF $8.1 MILLION.

  - THE DEPARTMENT WILL CONTINUE AND EXPAND PROGRAMS FUNDED IN FY 1993 USING RESOURCES OF THE AGENCY FOR INTERNATIONAL DEVELOPMENT.

  - THESE INCLUDE FUNDING THREE ADDITIONAL CONSORTIA OF AMERICAN BUSINESSES IN THE NIS (CABNIS) GRANTS; CONTINUING THE SPECIAL AMERICAN BUSINESS INTERNSHIP PROGRAM (SABIT) -- AN EXCHANGE PROGRAM FOR U.S. AND RUSSIAN BUSINESSMEN AND SCIENTISTS; SUPPORT FOR THE U.S.-RUSSIA BUSINESS DEVELOPMENT COMMITTEE AS IT WORKS TO OVERCOME OBSTACLES TO TRADE IN THE NIS; AND, CONTINUING TO PROVIDE COUNSELING SERVICES THROUGH THE NIS BUSINESS INFORMATION CENTER.

- TO ENSURE THAT THE UNITED STATES AND FOREIGN COMMERCIAL SERVICE PROVIDES THE NECESSARY LEVEL OF ASSISTANCE TO THE U.S. BUSINESS COMMUNITY, I AM REQUESTING AN INCREASE OF $10.5 MILLION TO RESTORE OVERSEAS PURCHASING POWER. THE DECREASING VALUE OF THE DOLLAR, INCREASING OVERSEAS INFLATION AND INCREASING OVERSEAS WAGES WERE CONSISTENTLY HIGHER THAN THE FY 1989 THROUGH FY 1992 ADJUSTMENTS TO BASE FOR OVERSEAS WAGES AND PRICES.

- CLEARLY, ONE OF THE MOST EFFECTIVE WAYS WE HAVE IN THIS COUNTRY OF INCREASING ECONOMIC GROWTH IS BY INCREASING OUR EXPORTS.

- TO DO THAT, THE INTERNATIONAL TRADE ADMINISTRATION MUST CONTINUE ITS WORK TO SUPPORT AND EXPAND FREE AND OPEN TRADE. THE ENFORCEMENT OF TRADE LAWS AND MULTI-LATERAL TRADE AGREEMENTS IS ESSENTIAL IF WE ARE TO SMOOTH THE WAY FOR AMERICAN BUSINESSES TO GROW BY EXPANDING THEIR OVERSEAS MARKETS.

- INTERNATIONAL TRAVEL IS AMERICA'S LARGEST BUSINESS SERVICE EXPORT, AND THE PROGRAMS OF THE UNITED STATES TRAVEL AND TOURISM ADMINISTRATION CONTRIBUTE TO THE CONTINUED GROWTH OF THIS EXPORT. RECENT USTTA AUTHORIZING LEGISLATION CALLS FOR INCREASED ASSISTANCE TO STATES, CITIES, AND NON-PROFIT ORGANIZATIONS FOR THE DEVELOPMENT OF COOPERATIVE TOURISM MARKETING PROGRAMS. I AM REQUESTING $2.5 MILLION FOR THESE PROGRAMS.

STRONG AND SUSTAINED GROWTH OF THE MINORITY BUSINESS SEGMENT OF OUR ECONOMY IS A GOAL OF THE MINORITY BUSINESS DEVELOPMENT AGENCY. MBDA'S PROGRAMS ARE IN A UNIQUE POSITION TO SUPPORT THAT GOAL AND TO ENSURE THAT NEW BUSINESSES ARE ABLE TO MAKE LONG-TERM CONTRIBUTIONS TO OUR NATION'S ECONOMY. FOR THIS REASON, WE ARE REQUESTING AN APPROVAL OF FUNDING FOR AN ADDITIONAL $5 MILLION.

THAT LEADS ME TO THE THIRD THEME IN OUR FY 1994 REQUEST, AND THE ONE THAT IS DIFFICULT TO HAVE TO IMPLEMENT.

- MY EXPERIENCE AS SECRETARY OF COMMERCE, AND THE MESSAGES THAT WERE MADE QUITE CLEAR TO US DURING LAST YEAR'S CAMPAIGN, HAVE ALL UNDERSCORED THE NEED TO SCALE BACK ON THE COSTS OF GOVERNMENT, WHEREVER POSSIBLE. AS A TAXPAYER AND AS A CABINET OFFICER, I WANT TO MAKE SURE THAT GOVERNMENT IS PROVIDING ESSENTIAL SERVICES REQUIRED AT THE LOWEST POSSIBLE BURDEN ON THE TAXPAYER.

- AT THE SAME TIME, I AM TAKING TO HEART THE THEME THAT THE PRESIDENT HAS SOUNDED: WE ALL MUST TIGHTEN OUR BELTS IF THE NATION'S ECONOMY IS GOING TO GET BACK ON TRACK.

COMMERCE IS NO EXCEPTION TO THIS:

- NEXT YEAR, WE HAVE INCLUDED ACROSS-THE-BOARD CUTS TOTALLING $88 MILLION, INCLUDING:

    - $38 MILLION BY FORGOING THE 1994 PAY RAISE,

    - $29 MILLION IN ATTRITION SAVINGS FROM A 2.5 PERCENT REDUCTION IN EMPLOYMENT THROUGH 1994, AND

  - $19 MILLION IN ADMINISTRATIVE SAVINGS IN TRAVEL, CONSULTING, AND COMMUNICATIONS COSTS.

- I PROPOSE TO ELIMINATE $65 MILLION IN NOAA. THIS AMOUNT INCLUDES NON-RECURRING ITEMS, AND PROGRAMS, PROJECTS AND DEMONSTRATIONS THAT I BELIEVE ARE LOW-PRIORITY IN VIEW OF THE BELT-TIGHTENING THAT COMMERCE AND THE NATION MUST GO THROUGH TOGETHER.

- A DOWNWARD CYCLE IN THE CENSUS PROCESS ALLOWS ME TO REDUCE $36.7 MILLION FROM THAT PROGRAM.

- FINALLY, CHANGES IN THE BUREAU OF EXPORT ADMINISTRATION WORKLOAD ALLOW A REDUCTION OF $6 MILLION. THE TRADE ADJUSTMENT ASSISTANCE PROGRAM WILL BE TERMINATED, SAVING $13 MILLION. TAA ACTIVITIES WILL BE ASSUMED IN OTHER COMMERCE AND SBA BUSINESS ASSISTANCE EFFORTS.

COMMERCE HAS ADDITIONAL WAYS OF SAVING FUNDS OR RAISING REVENUES. FOR EXAMPLE:

- THE ADMINISTRATION IS PROPOSING THAT NTIA TRANSFER A PORTION OF THE FEDERAL RADIO SPECTRUM TO THE FCC FOR AUCTION TO THE PRIVATE SECTOR. IT IS ESTIMATED THAT THIS WILL PRODUCE $4.4 BILLION IN REVENUES FOR THE U.S. TREASURY OVER THE 1994 - 1998 PERIOD.

- WE WILL BE SEEKING AUTHORITY FOR THE PATENT AND TRADEMARK OFFICE TO INCORPORATE THE PATENT FEE SURCHARGE INTO REGULAR FEE RATES, YIELDING OVER $100 MILLION A YEAR.

THIS CONCLUDES THE FORMAL DISCUSSION OF OUR FY 1994 BUDGET REQUEST. THE RELEASE OF THE PRESIDENT'S BUDGET DOCUMENTS WILL BE APRIL 5, AND OUR COMMERCE JUSTIFICATIONS WILL BE PRESENTED AT THAT TIME, AS WELL. I'LL BE PLEASED TO DISCUSS ANY QUESTIONS YOU MAY HAVE.

Mr. SMITH. Mr. Secretary, you have already answered a good share of the questions that I had thought of, and I won't ask you to repeat those answers. It did remind me, though, of the huge responsibility you have.

I recall that when President Roosevelt talked to Henry Wallace, who was an Iowan and a great futurist of his time, way ahead of his time, he told him after the 1940 convention, that he could have any job he wanted in the United States Government other than Secretary of State. And he said, without any hesitation, I want to become Secretary of Commerce, because he understood where all of these things are that affect the future of the country and the world, for that matter.

One of them, of course, is in an area that you mentioned—exports, as well as imports. The responsibility for export control is under different agencies. It is in so many different places. With our policies, it seems we both curtail exports and promote exports.

In curtailing exports, each administration has a little different kind of a program than the one before it. The last one was dominated, in my opinion, by the Secretary of Defense. They had three or four different Department heads that would meet, and the Secretary of Defense in the end would make the determination. And it got down to one point where they wouldn't even permit the exporter to sell computers that were available anywhere else in the world.

And then you have the SBA, which is not directly under the Department, but it has a lot to do with exports and imports because we depend so heavily on small businesses in this country to get started and to stay on the cutting edge of high technology and to produce the kind of components that go into an assembled product. We no longer have a manufacturing system where it is all done under one roof.

IMPORT AND EXPORT CONTROL

I stuck in my pocket here an ad this morning by Toyota where they are manufacturing a car at Georgetown, Kentucky, and it says they have 390 American suppliers for parts. They assemble. That is what they do. They are not a manufacturing plant. They assemble. We are in a completely different world than we used to be.

Can you tell us anything this morning on whether you are going to have any reorganizations of the way that you handle these export and import control problems?

Secretary BROWN. Mr. Chairman, you have certainly raised an important issue and one that I have given some attention over the last several weeks. I am fully aware of the complaints and concerns that have been raised before about the seemingly back-bench role that the Commerce Department has played in these decisions with Defense and State being preeminent and, of course, the National Security Council interests as well.

These are all valid interests. We are all concerned about problems of potential proliferation. I share those concerns. But I want to assure that, in fact, economic interests have a more important place at the table than they have had in the past. That means that the Commerce Department is going to have to be more assertive in these discussions. It means that the Bureau of Export Administration is going to have to be more assertive in these discussions. And it means that American business and economic interests are going to have to be given greater attention than has been given in the past.

We have already had discussions within the Administration about how this might take place and how we can ensure the inclusion of the Commerce Department in those discussions in ways that, evidently, we haven't been including before. So I think, Mr. Chairman, you raise an important point, and I see one of my primary roles is speaking to the needs of American business and industry.

If we are going to profess that, in fact, an increase in exports is one of the ways to assure economic growth in America, it seems to me we have to follow that admonition in everything we do, including dealing with the sensitive issues of export controls.

NATIONAL WEATHER SERVICE AND USER FRIENDLY APPROACH

Mr. Smith. And then you have a responsibility for weather and NOAA and technology, as you have mentioned, and fisheries and related matters. I come from Iowa and I didn't know there were any kind of fish other than catfish and carp before I got on this committee. But I find out there are a lot of them, and they are very important to the U.S. economy. You have all those major areas to take care of.

You didn't mention one thing that hit a theme with me. Your third theme was to scale back the cost of government but make it user-friendly. I remember going down to the Department one morning, and they were showing me these ways that they were cutting costs.

And they had something that when the small businessperson would call in, they would get this recording. It would give them nine alternatives. If your question relates to this, you punch one. By the time they get to the end of it, they couldn't ever remember which one it was that they wanted to punch. I hope this is not in your program.

Secretary Brown. No, that is not a part of the user-friendly approach, Mr. Chairman.

I might add, though, you mentioned NOAA and the Weather Service and fisheries are all issues of importance to the country which we deal with. I think it is a good time for me to get on the record a commendation for the performance of the National Weather Service during the weather disaster of a couple of weeks ago. They were right on the mark with their predictions. The new Doppler radar worked marvelously.

I happen to have been up at a NOAA principal facility in Silver Spring on Friday, the day before the storm, and saw them all working feverishly and communicating up and down the East Coast with those areas that would be most hard hit. They were able to predict the track and the intensity of the storm to an incredible degree, and I think they really deserve praise, not only from us, but from the Nation.

Mr. SMITH. Well, they do, but I happen to have been one who pushed for building a dam just above Des Moines to save us from floods. Two years after it was completed, it saved we don't know how many lives and probably more than the cost of the dam, but nobody ever appreciated that, you know. I mean, you don't get credit for what you save people from, it is only complaints while you are trying to do it.

But it is certainly true what you say, and we need to do a lot more with regard to weather, and we can. We don't have the constituency for it right now, but—for example, last year we put $21 million in additional funds to work on trying to come up with better answers for global climate change and the causes of El Nino. These are terribly important investments for this country, and for the future.

Secretary BROWN. With some real economic impact, Mr. Chairman. As you know, the farmers in your State are well served, not only physically but economically, by accurate weather forecasts.

Mr. SMITH. Absolutely.

Secretary BROWN. And it affects our economy up and down the line.

As you know, one of the areas in the budget request is for additional weather service radar and satellites and facilities. This spring, we are going to be putting in the equipment that was knocked out during the last major hurricane in south Florida. This will give us some assurance that we will be able to come up with the right kinds of predictions so that when hurricane season returns this year——

Mr. SMITH. Well, I hope the next time the Commerce Department budget comes up the Senators in Florida won't be in the lead trying to cut it.

Secretary BROWN. I share your view, Mr. Chairman.

Mr. SMITH. Mr. Rogers?

Mr. ROGERS. Mr. Chairman, thank you very much.

Mr. Secretary, it is good to see you.

Secretary BROWN. Nice to see you.

Mr. ROGERS. Congratulations on your appointment to a very important post, and we wish you the very best and much success.

Secretary BROWN. Thank you very much.

Mr. ROGERS. I can't help but remark to the Chairman, in response to his comments about the Toyota plant in Kentucky and his mention of the travel and tourism figures—I want to invite him and you, Mr. Secretary, to travel to see that Georgetown plant of Toyota and the dozens of supply factories in Kentucky that have created many new jobs and to see that Camry being assembled down there.

And then, Mr. Chairman, I will show you not some catfish or carp, but I want to show you some small-mouth bass.

Mr. SMITH. I like large-mouth bass.

Mr. ROGERS. Take your pick.

Mr. Secretary, in the people's call for change, I think it is centered around their need for a better economic well-being than they had—that motivated many people in this last election. And that economic well-being, of course, is your bailiwick now as the President's Secretary for Economic Development, more than just

Secretary of Commerce, because certainly, you are in charge of more than just trade issues.

So I really think what you have outlined to us is that your goal is economic development, much broader than commerce or trade.

COMPETITIVENESS

One question that I have deals with the emphasis on what you will be asking the country to do. The Competitiveness Policy Council, for example, in their most recent report states that, once again, our trade deficit has increased by almost 30 percent, from $65 billion in 1991 to $84 billion in 1992. But the ground that we lost was in medium- and low-technology manufacturing, not high-technology manufacturing.

I know you have ambitious goals for high technology, which I think all of us share. But I want to ask you, are we simply conceding the low technology and medium technology industries to our foreign counterparts? What role can the Department play to help low- and medium-technology manufacturing to improve their trade position given that is where we have lost competition to offshore?

Another example of this is that we graduate tens of thousands of MBAs and very few mechanical engineers any more. We don't know how to make products on the low and medium technology end. And so we are conceding that market—those jobs, to our offshore competitors. Have you thought about that?

Secretary Brown. Yes, we have, Congressman Rogers. I have had an opportunity to look at the report to which you refer. I don't want to concede anything. I think you are right. Much of the emphasis has been on high technology and the remarks both that we have made in our testimony and in other public remarks.

But we cannot forget the other part of the technology equation. I believe that we can speak to those issues effectively through the manufacturing technology centers approach, through those programs that reach out directly to small- and medium-sized businesses and reach out to businesses, many of which high technology wouldn't even be appropriate.

So I don't look to exclude other than high technology. I think we need to be competitive across the board. It certainly is the intention of the Department to focus not just on high technology but on technology generally if we are going to be competitive into the future.

Mr. Rogers. Well, it seems in the past—and this is a fairly conventional wisdom—that we have had the ideas and developed the patents and then somebody else developed the product.

Secretary Brown. And the profits.

Mr. Rogers. And the profits—and the jobs. And the manufacturing process was taken away from us by people skilled in the manufacturing techniques.

It seems to me one of the best things we could do would be to, if anything, offer some incentives for mechanical engineering graduates, because we are not manufacturing well and not adapting ideas to product lines to then sell those products.

Let me switch gears with you a minute then.

INDUSTRIAL POLICY

The Washington Post recently ran a story that raised a number of questions about the appropriateness of applying the Asian model of the industrial policy versus the American system.The article discussed the appropriate role of the government and industry and the interplay between them.

The Asian model is one that has proved very effective in the past, the kereitsu—which, of course, we cannot do in this country, nor do we want to. Many people now say the Asian model was appropriate for an undeveloped country such as most of the Asian countries were—Japan, Taiwan, Singapore and others—but when they become more developed and their manufacturing processes are competitive in the world market and the industries that they are attracting are more complex than simple—mass manufacturing—that model does not work as well.

It seems to me that we are now adapting, to some extent, the old Asian model to our needs. Meaning, the government is becoming very heavily involved in research and development on behalf of industry, subsidizing selected industries in certain aspects, and making choices, I think, between winners and losers in many cases. You and I aren't going to agree, I don't think, on this very much, although I think we probably agree more than we disagree. But there are some evidences of selection of industries.

Last month, the administration unveiled a new activist policy for fostering advanced technologies in Silicon Valley. The President and Vice President Gore outlined a very broad plan to steer $17 billion in tax breaks and government spending into high-tech endeavors, including a program for Washington to join with U.S. auto makers to develop a clean car of the future.

So there are some evidences of picking winners and losers and the government deciding which industry shall prosper and which shall not prosper. I think the experience that we have had in the past in this country is that the government isn't that smart. The market is the better judge of winners and losers.

This is a long way of asking you whether or not you think the government should be doing more or less of the picking of winners and losers in the marketplace.

Secretary Brown. Well, Mr. Rogers, as you know, it is a complicated issue, one that we could discuss for hours. I think we have to develop a uniquely American model. I think, clearly, we can learn by what others have done.

It seems increasingly clear to me, and I think most Americans, that we haven't been doing everything right in the past. We need to redefine the relationship, as I said earlier, between the public and private sector. I think we have to have a partnership for a change. The government and the private sector can't be seen or see themselves as adversaries. Certainly not if we are going to compete effectively against competitors all over the world who are doing it much differently and do have a real partnership. We don't have to have the same kind of partnership they have.

We have read that some analysts have said that the Department of Commerce is going to be the American version of the Ministry of Industry and Trade in Japan. I want to learn from what they have done. I think it would be silly not to. However, I don't want to copy anything that any other country has done. There are some unique things about our country and our culture and our heritage, the way we operate. There are also some things that have to be changed about the way we go about doing business if we are going to compete effectively. We can call it what we want. This administration believes we need some kind of national economic strategy in America if we are going to compete long term, if we are going to create high-wage, high-quality jobs for our people.

The President has said repeatedly—and I have said a number of times in testimony and other places-we don't want to be about the business of picking winners and losers. We don't think that is what partnership means. We think that things have to be private-sector driven. This new partnership clearly is a partnership in which the private sector is a driving force, the engine that pulls the train. We are just there to help when and where appropriate. There are some places where we ought to get out of the way, places where we can be more helpful.

I think a good example of the kind of relationship we are talking about is the Advanced Technology Program, which, as you know, is a bottom-up, private-sector-driven effort, which defines a partnership in the way that I think makes sense. The ideas, the creativity, all come from the private sector. And the government is there to try to help, to encourage, to try to advance technological innovation that might not take place if it was left entirely to the private sector, either because it might be too costly or too risky, but where there is still a great advantage over the long term for our economy and for our people.

That is the kind of approach that we would like to undertake, not one that looks at a company and says we want to make this company successful to the detriment of other companies, but one that looks more to the future, more to long-term viability, and long-term growth and long-term profits than to just the short-term emphasis we have had for too long.

So I think, Congressman Rogers, we would probably be a lot closer on some of these issues than you might suspect.

Mr. Rogers. Well, I hope so.

Let me cite an example. Taiwan recently scrapped its old system of giving tax incentives to a long list of specific favored industries. For example, they had a tax break for quote, explosion-proof electric motors, double-coated enamelled wire for electrically operated hand tools with double insulation, and so forth.

That old system, back when they were an underdeveloped country, probably worked to bring them up to a quite sophisticated industrial system. But now that they are modernized, it is much more difficult for the government to direct them. Now they have scrapped the old system in favor of tax breaks to companies, regardless of industry, for R&D, for automation, and for personnel training. They are giving more general incentives that foster growth, and let industry bring the products and pick what is best for the marketplace.

Secretary Brown. That would be more like the approach that we would take. The administration certainly has no intention to get into subsidies for specific industries.

Mr. **Rogers**. Let me close by quoting from this same Washington Post story, written by Paul Blustein, by quoting from Kazuo Nukazawa, managing director of the Keidanren in Japan, the chief big business group. He says, quote, personally, I think it is very difficult, if you have a billion dollars, to decide whether to spend it to help the ceramics industry or biotechnical or semiconductors or whatever. You may find you are basing your decisions on phone calls from congressmen and senators rather than on economic rationality. This is the dark side of industrial policy, end of quote.

Mr. **Smith**. We will have to try to hold this to five or six minutes or we won't all get around.

Mr. Mollohan?

Mr. **Mollohan**. Thank you, Mr. Chairman.

Welcome, Mr. Secretary. It is good to see you again here in a very short period of time.

ECONOMIC POLICY

Mr. Secretary, I am particularly pleased to have you here so that we can talk about economic policy and reinvigorated Federal Government effort in that regard, particularly as it focuses on promoting technology and competitiveness.

In the President's technology policy, which he released in February in the Silicon Valley, he talked about a reinvigorated Office of Science and Technology Policy to lead in the development of science and technology policy and a new National Economic Council to monitor the implementation of new policies and to coordinate technology policy on tax, trade and regulatory issues and other policy agendas. I know Commerce's programs focus in on these issues as well, particularly NIST, and I know NIST will be a centerpiece of the President's competitiveness initiatives. What role do you see Commerce playing in terms of policy recommendations for new technology initiatives?

Secretary **Brown**. A very important role. As you know, the President has indicated a number of times, both during the campaign and since the inauguration, that there is not going to be a new Civilian Technology Agency, that the Commerce Department will be the Federal Government Civilian Technology Agency. We take that charge seriously, so we intend to play an important leading role in those efforts.

The office, directed by Dr. Jack Gibbons at the White House, is a very, very important coordinating vehicle. We will be working closely with that office. The National Economic Council is a new vehicle that the President has put in place to coordinate economic policy generally, and to raise the level of discussion on economic issues in the policy-making arena. Under the leadership of Bob Rubin, this Council will also play an important role.

We work closely, both in terms of the deputy's committees and the principal's committees. I serve on the principal's committee of the National Economic Council, am fully engaged and involved in all of those policy discussions.

Mr. **Mollohan**. Well, there are a lot of entities poised as active players in technology development. They are positioned to serve well in the competitiveness agenda of the administration. DARPA, or ARPA as it is now called, is refocusing its efforts, and it has a considerable amount of money to spend on conversion activities. I suppose it is considered to be a big player on the block.

Secretary **Brown**. Yes. Some of which we are expecting to receive.

TECHNOLOGY RESOURCES

Mr. **Mollohan**. That is anticipating my question a little bit. NASA is a premiere technology transfer agency, probably doesn't have the reputation it should have in technology transfer, particularly in aerospace. The Department of Energy is active in technology transfer, as is the Department of Commerce. Could you speak to how those efforts are going to be coordinated at the programmatic level and to what Commerce's role might be in that coordination effort?

Secretary **Brown**. Well, you are absolutely right in that some of those technology resources are scattered among several agencies of the Federal Government, the Department of Defense being the principal one. President Clinton has stated emphatically that we have to move from military technology to civilian technology.

Clearly, there is going to have to be coordination between the affected agencies. That coordination is now taking place. I indicated there will be some transfers of resources from the Defense Department to the Department of Commerce. We will be working closely with Defense, DOE, NASA and the National Science Foundation and others who are involved in these efforts.

I think we have a system in place that will send a clear signal that, in fact, it is not just rhetoric to indicate that we are moving from military to civilian but really there is a transfer of resources. That is the real test. I think it is going to take the kind of coordination you suggest to make sure we are able to meet that test, so we don't look up four years from now and see the same percentage of our technology resources are for military uses.

And it requires a different kind of process. When you know who your end user is, it makes it somewhat easier to monitor and coordinate. When you don't know who your end user is, which is generally the case with civilian technology, it makes it more complex. And we have to have a system that allows us to use effectively those resources.

Mr. **Mollohan**. There is a lot of capability out there. DARPA, now ARPA, has been a bit of a single shot kind of high-tech development capability servicing a particular customer, traditionally the military. I believe that Commerce should be focusing on a full kind of service where traditional manufacturing entities, large and small, are able to take advantage of new technology and incorporate it in on the shop floor in the manufacturing process. As I look at it, this is where we currently have a real gap in technology transfer and I think that is the kind of question that Congressman Rogers was asking.

As you look at coordinating the efforts, I would encourage you to also look at how the Federal government really services not only technology development but also the transfer of that technology to the commercial sector, right down to the shop floor. There are a lot of manufacturers which could benefit greatly by mechanization and computer-flexible manufacturing right now, if they knew it existed. Learning of its existence has proven to be a challenging task for our country's manufacturers.

Secretary BROWN. Well, you are absolutely right. And to give you some specifics about what we anticipate from DARPA, of the $500-plus million for those ARPA, formerly DARPA, initiatives, it appears that about $125 million of it will be administered by NIST, much of that for the manufacturing extension assistance, the kind of concept you referenced to, and about $30 million for technology and new products creation area, a new program that we have set up.

So I think you are absolutely right. It is not only technological innovation, but it is technology transfer, which is important to get it into commercial use. And clearly that will be a focus. I think that is one of the ways that we can demonstrate our commitment to moving from military to civilian technology.

MANUFACTURING TECHNOLOGY CENTERS

Mr. MOLLOHAN. I think the MTC is a great program to transfer that technology to the manufacturing sector.

I believe that in fiscal year 1993, we appropriated $18.2 million for that. In 1994, you are requesting $30.2 million, and I am just wondering if that is enough. I know that a big part of the President's campaign was to promote over a hundred manufacturing technology centers around the country. Can you explain why there is not a more significant request for 1994? What is the Administration's position in terms of the pace at which we deploy manufacturing centers?

Secretary BROWN. Yes. And the present budget request would by 1997 take us to close to 100 manufacturing technology and extension centers. You are absolutely correct, though. The 1994 figure is $30.2 million, and we take it to $90 million in 1997. So it is a gradual gearing up of our manufacturing extension partnership program.

But you ask an appropriate question. I wish we had more resources to do what you suggest and what we would like to do. We think we have submitted a prudent request. We think we have ramped up properly between now and 1997.

Mr. MOLLOHAN. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Mr. SMITH. Mr. Moran?

Mr. MORAN. Thank you, Mr. Chairman.

Well, with the right kind of leadership—and I trust that you are that right kind of leadership, Mr. Secretary—the Department of Commerce can become the most important Federal agency of the 21st century because you have the responsibility for technological research and development instead of the $30 billion a year we have been spending in the Defense Department. You have the responsibility to do it in the civilian sector. You have the responsibility to construct the information telecommunications highway that is necessary for international competition. You also have, really, the responsibility to enable us to move from military competition to international economic interdependency.

And since my distinguished colleague from West Virginia has asked the question that I had intended to get into, I am going to get into that latter part of your role.

FOREIGN COMMERCIAL SERVICE

We are very conscious of what is happening in Russia today. And, over the next few days, the amount of emphasis we can put on the goals of the Commerce Department versus the resources we need to devote to Defense may be largely influenced by what happens in Russia.

It is of concern to me and I know many others that much of the promise that we have given Russia for assistance has proven hollow. I don't want to say insignificant, but certainly a disappointing amount of assistance that we had promised Russia has actually been given Russia. And some of that is because of bureaucracy. Secretary Christopher is asking for more aid today. It seems to me the first thing we ought to do is to get the aid that we have already authorized to Russia.

Now, I want to raise an example. Russia's two principal resources are its military investment—its weaponry—and its natural resources. Its natural resources may make it the richest nation on earth if they were properly developed in an environmentally sensitive manner. If we don't want Russia to, out of economic necessity, export submarines to Iran or nuclear capability to North Korea, we have got to help them, particularly in the area of natural resource development.

There is a consortium of individuals and firms that try to develop a plan for using Russia's natural resource capability through the development of legal, regulatory, taxation, licensing, environmental guidelines. They have the approval of the Vice President of the Russian republic, the Russian Academy of Sciences, all the leading American oil companies, an agreement between the Russian Geological Institute and the Russian Oil and Gas Ministry. It was all put together. It was supposed to be funded from USAID through the Freedom Support Act, but it has to come from Commerce Department, I assume your Foreign Commercial Service.

I am told that, unless the fifth floor at Commerce knows and wants a project, it drops through the bureaucratic black hole. Now, that is the reputation of the past, I am sure. But I want to know what we are doing in terms of helping Russia today develop those kinds of guidelines, those kinds of regulations, the kind of legal structures that will enable real aid to get to Russia at a time when we can work with its leadership and know that we depend upon the sustainability of that current leadership.

What are we doing currently, Mr. Secretary, to help our ally and the Yeltsin government, let me say, in particular?

Secretary BROWN. Well, first, Congressman, we have covered up the black hole. There is no more black hole.

Mr. MORAN. What happened to the stuff that dropped in before you covered it up?

Secretary BROWN. We pulled it out.

Mr. **Moran**. You pulled it out. Okay.

Secretary **Brown**. We believe—the fifth floor, as you know, is where my office is, that we are going to be totally focused.

Mr. **Moran**. I assumed that that was the reference.

Secretary **Brown**. We are going to be totally focused on those priority items that the Administration is desirous of giving attention. Obviously, we are going to be seeking the advice and counsel of the Congress in helping us to identify those priorities.

Clearly, our relationship with the former Soviet Union, is one of those priority areas. I have given a great deal of time and attention to it from an economic and business development sense over the last six weeks. I spent a good deal of time with Deputy Prime Minister Shokhin when he was here talking about these issues.

I am going to cochair the Business Development Committee—U.S.-Russia Business Development Committee. We are going to meet in Russia sometime this spring.

In addition to that, we are doing some very specific things. The United States Foreign and Commercial Service is playing one of the lead roles. We are opening new offices in seven locations in Russia. We are establishing new American business centers in the Newly Independent States, having some money transferred from the Agency for International Development, which was under negotiation for some time. Approval for that transfer has now taken place, so we will be able to do more than would have been the case before.

We are establishing a business information center here in Washington for American businesses interested in doing business in the Newly Independent States and in Russia.

We are implementing the Special American Business Internship Program, which we think can be very important, where U.S. businessmen and women will spend time in Russian companies, and Russian businessmen and women will spend time here in U.S. companies. We think this program will enhance our efforts to assist in economic development in Russia.

You are right in identifying these new consortia. I guess it is about two weeks since we and the consortia members announced the new effort. We think it is an important effort. We will continue that program which has a cost of $1.7 million, a modest amount, but we think appropriate for a start-up kind of effort.

We are providing staff support for the U.S.-Russia Business Development Committee, and we are continuing the so-called SABIT or internship program.

So we think there are a number of efforts. I think a lot of it has to do with the kind of leadership we show, which is not always money driven, but the kind of time and attention and coordination we give, the kind of outreach we do to small- and medium-sized American companies, getting them interested in doing business in Russia.

I had a meeting just about a week ago with a couple of members of the United States Senate who had some ideas about things that we could be doing in Moscow with private-sector interests from the United States and from Russia working together on a mall type of facility in Moscow.

So there are a number of things going on. I think the more time and attention we give, the more we focus. And, obviously, there are reasons other than purely economic reasons for assuring a further democratization and moving toward market-driven economics in Russia. Our concerns about proliferation, which you mentioned in your question, and many other concerns make it sensible for us to establish these kinds of relationships.

Mr. MORAN. As you know, time is of the essence. We went over to Moscow. I know the whole group was so impressed with the receptivity of the Russians to American investment. But it is the private investment we need. And the private firms are willing to invest but the kind of assurances they need as private corporations that their investments will be safe are not ready yet.

It seems that the Commerce Department has a major role to play in creating the kind of structure that American private corporate investment can trust. They must be able to invest in Russia and know that under private property ownership, the income they make will be theirs. It is those structures that are missing. Although they are complicated, I think only our Federal agencies can provide that kind of structure. It just seems to be moving so slowly, and it may have been too late now for the Yeltsin administration. I don't know what is going to happen. But we are glad you are as interested as you are and will hope that you will make that a high priority.

Thank you, Mr. Secretary.

Mr. SMITH. Mr. Kolbe.

Mr. KOLBE. Thank you, Mr. Chairman.

Mr. Secretary, welcome.

Secretary BROWN. Thank you, Mr. Kolbe.

PRIORITY ISSUES

Mr. KOLBE. It is good to see you again.

A quick question on the overall budget before I get into another area that I want to concentrate on. I appreciate the comments you made about the need to, as you put it, scale back on the cost of government wherever possible, and tighten our belts. This Nation's economy is going to get back on track.

But I think—in fairness, we have in this request a 15 percent increase. Even in NOAA where you talked about the need to eliminate low-priority programs and belt tightening, you have a 12 percent increase in the budget request for NOAA. Is it fair to characterize this as a belt-tightening budget at a 15 percent increase?

Secretary BROWN. Sure. I think across the board there has been belt tightening. Obviously, we are reordering our priorities. This Administration has a very different set of priorities than the previous Administration did, and, hopefully, the budget reflects that. We think that technology is terribly important.

So, yes, Congressman Kolbe, we have put a good deal of attention on the technology area. We think that the work that the National Oceanic and Atmospheric Administration does is terribly important for the environment and commercialization of environmental technology; the Weather Service, which I have had an opportunity to mention before, some modernization efforts to keep us on the cutting edge; the work we do in the area of fisheries. We think all of those things have a significant, long-term economic impact.

So you are right. There has been a reprioritization. We think it is the correct one.

Mr. KOLBE. Well, okay, maybe a reprioritization and there may be belt tightening in some of the other budget areas, but since your comments were directed to the Commerce request, I was just directing my remarks to that. A 15 percent increase doesn't strike me as belt tightening, but, if I might, we will leave that.

Secretary BROWN. Well, I don't want to leave it.

Mr. KOLBE. I would like to go to some areas where we do have some agreement on.

Secretary BROWN. We are cutting back on personnel. And I mentioned specific instances of that in my testimony. The Bureau of Export Administration being one, a 2.5 percent decrease across the board. We are looking at administrative costs. So I think while we have built up other programs that we think are important to the future of our country and our economy, we are tightening our belts in some areas which I think are important and will be painful in many respects.

EXPORT TRENDS

Mr. KOLBE. Let me turn to an area in which you and I have, I think, a little broader agreement, and that has to do with the area of trade. Before I specifically talk about your recent trip to Mexico, I did want to ask a question.

In the first page of your testimony, you refer to the fact that our economy has not kept up with changes, referring to the change in global economy, our ability to master technological changes, stay at the forefront of ongoing development. The fact of the matter is that our exports have more than doubled in the last six years, and they have contributed 45 percent to total economic growth in the last five years in this country. Is that not an accurate statement?

Secretary BROWN. It is accurate, and I acknowledged, Congressman, that one of the few bright spots in economic performance had been increased exports. I think we can do better. I think if we can get more companies involved, I think we can do better as far as opening markets, leveling the playing field in some respects. So I think those two comments are not in conflict with each other.

NAFTA

Mr. KOLBE. Okay. Let me ask you specifically about that. You mentioned the area that I wanted to talk about specifically and that is Mexico and your recent trip down there. It got a lot of attention. It seems that it was a very successful trip.

Tell me, in your view, how are U.S. companies competing in the Mexican market with companies that are domestic Mexican companies or foreign companies from Europe or the Pacific Rim? And what kind of export opportunities did you see from your trip down there?

Secretary BROWN. Well, Congressman, we are doing well. I think we could do a lot better with NAFTA in place. I would share your characterization of my trip as successful. I had an opportunity to spend a good deal of time with President Salinas, with several members of his cabinet, with Mexican businessmen and women, with American businessmen and women who are operating successfully in Mexico and are very encouraged and hopeful and optimistic. Obviously, a lot is riding on NAFTA.

I think the Mexican economy will continue to grow. I think reform will continue to take place with or without NAFTA. I think NAFTA will certainly help in that effort.

I had an opportunity to visit with officials of General Electric and Bechtel who are involved in the kind of partnership relationship to which I referred earlier, only this time it is with the Mexican public utility. A $675 million cogeneration project, very important to the Mexican economy, but also very important to our economy, using all American technology and American equipment. Just the kind of thing we ought to be doing more of.

It seems to me that it is terribly important for us to be sensitive to the need for continued growth in the Mexican economy for a lot of obvious reasons and some not so obvious. As we seek to increase exports—and we have a surplus with Mexico now, as you know—but, as we seek to increase exports, you can only trade with folks who have some resources to trade with you. And as the Mexican economy grows, we can sell more and more American products in Mexico.

So we have a vested interest. And that is why I feel strongly that NAFTA is not only good for Mexico and Canada, it is good for the United States over the long term if we are really serious about economic growth.

Mr. KOLBE. I appreciate that.

The final question on this, to follow up on your point about NAFTA, how in your view is NAFTA going to assist our companies in this process?

Secretary BROWN. I think it opens markets. The goal, as you know, is to eliminate tariffs over a period of time, so you get down to zero for zero situation. That helps in trade. It helps increase exports. It does, first and foremost, increase American job opportunities.

I know that there are concerns, and many of them are legitimate concerns. I discussed those concerns with President Salinas—concerns about workers' rights and the environment. President Clinton has stated unequivocally that we are concerned about workers and the environment on both sides of the border. We are now in the process of negotiating a supplemental agreement which we think will speak effectively to those concerns. In addition, the concern about the possibility of sectoral surges.

I think that all of those things can be dealt with in the supplemental agreements that will get NAFTA well on the road to implementation on January 1st, 1994. That certainly is the hope of the Clinton Administration, and I think American business interests, and, therefore, American workers, will be helped significantly.

Mr. KOLBE. I fully concur with your view that it would help business interests in this country. Thank you very much.

Mr. SMITH. Mr. Skaggs?

Mr. SKAGGS. Thank you, Mr. Chairman.

Good morning, Mr. Secretary. It is good to have you back again.

Secretary **Brown**. Thank you.

DEFENSE CONVERSION

Mr. **Skaggs**. I had a few comments and then a couple of questions. Let me just run through the comments quickly. First, it is a pleasure to find real numbers to sink our teeth into finally.

I wanted to ask you, particularly in your efforts through EDA, to deal with military base closing assistance, to keep in mind what is very important in my area and several others around the country, which is the Department of Energy's nuclear weapons facilities that are going through comparable adjustments.

I am sure you didn't mean to exclude them by referring to military base closings, but I think it is important to recognize that there is a very drastic downsizing going on within DOE as well, and they need some help.

Secretary **Brown**. I think, Congressman Skaggs, you are absolutely right. It was not my intention to exclude the areas that you just mentioned, nor was it my intention to exclude areas around defense contracting facilities that are closing. So it is not only bases, but it is all those defense-related kinds of activities. You are entirely right.

SCIENCE, RESEARCH AND TECHNOLOGY

Mr. **Skaggs**. One additional comment. A quick calculation, $2.5 billion of your $3.5 billion request is clearly in the area of science and research and technology, and I know the administration, not to overemphasize the importance of labels, but the Department of Commerce doesn't really convey what you do, and I think there is some value in trying to find a formulation that better communicates what you are about.

A question for you. First of all, I recently met with several of your employees in the Boulder area, and questions from several of them focused in on the technology transfer mission of the Department. They seemed troubled by either conflicting signals from management within the Department, or hurdles imposed by conflict of interest regulations, or statutory ambiguities, or whatever, in their being able to carry out with full enthusiasm the technical transfer mission of your labs.

You will probably run into the same question when you are visiting, if you haven't already, and it may be useful to do some kind of scrub of the current statutory authority and rules that pertain to this area, just to make sure that we haven't missed something that is causing this problem.

I think it is still also part of a cultural change that needs to permeate all of research-related government. But I wondered if you would comment on that.

Secretary **Brown**. Sure. It is an excellent suggestion. As you might recall, I think from my previous testimony here, we are already doing it in the antitrust area, but I think we need to do it in many other areas as well.

I plan to visit the Boulder facilities next Monday, and we have quite a number of facilities there. NOAA, NIST, and NTIA are all located in the same general area. So I am sure I will get some of those questions. And I think we can bring some clarity to those issues on that visit and on follow-up visits and discussions.

Mr. SKAGGS. Great. I appreciate it.

I was delighted to see the proposals with respect to increases for NIST in the infrastructure and operating side, and then flipped to the chart that projected out through fiscal 1998 your plans for NIST to find a target of $1.4 billion for NIST in fiscal 1998, which is two-and-a-half times plus where you would hope them to be for next year.

That is a striking proposal, and not one that I disagree with, but I thought I would invite you to elaborate on the strategic objectives that must underlie that kind of dramatic proposal.

Secretary BROWN. Well, as you know, Mr. Skaggs, this administration is putting a great deal of emphasis on commercialization of technology. I believe it was Mr. Rogers who indicated that we have often been on the cutting edge of technological innovation, but not on the cutting edge of profits from that technology commercialization and transfer of that technology.

We want to make sure that we are on the cutting edge; we want to make sure that it is private sector driven. We are recommending a very significant increase in funding for NIST, taking it from just under $400 million in fiscal year 1993 to almost $1.4 billion in 1997.

We think that we have suggested an appropriate way to get there. Clearly we have to increase our management capability, which we think we can do from year to year. We think NIST is very efficiently run now, and we think when you consider the new and creative things that they are doing, that ought to give us a real hope for the future.

Much of that is in the advanced technology program. As I recall the numbers for 1997, we are going to take that to $750 million in 1997. Also a significant increase, but one which we think is important, but speaks to the essence of what the administration talks about when we talk about a public-private partnership.

The ATP program is probably the best model of that kind of partnership, but with it being absolutely and totally a private sector driven, bottom-up kind of approach, we think those monies can be spent wisely. Much of it, too, is directed towards our manufacturing technology centers, which does the kind of technology transfer, both high tech and low and medium technology that we need to do.

What we have done is try to identify things that work, that we know that work, that can really make an economic difference for our country, that can really create jobs and export opportunities. So this is not some new pie-in-the-sky dream world approach, but rather identifying those programs that really work effectively, that reach communities and help industries in those communities be more competitive.

We do it, although it is a large jump, in a thoughtful, fiscally prudent manner.

Mr. SKAGGS. I should probably mention, since I think C–SPAN is carrying our proceedings this morning, that NIST is the National Institute of Standards and Technology, and avoid too many of our acronyms here.

EXPORT PROMOTION

One final question for this round. The Commerce Department has the principal responsibility for export promotion within the government. This administration has also stated its very serious intention to deal with nonproliferation of weapons; not just nuclear weapons, I would assume, but other advanced technology and dual-use items as well.

That involves an inherent conflict, and I am just wondering how you see your responsibility as the member of the Cabinet who promotes exports in balancing and weighing that conflict.

Secretary Brown. Congressman Skaggs, I am very sensitive to the proliferation issues. I spent a long time yesterday talking to Congressman Markey, who is very concerned about these issues as well.

I would hope that as I move to support American business and industry and to encourage the increase of exports, that we make sensible, thoughtful decisions on export licensing. And, I remain sensitive to the proliferation issues. I think as an advocate for business and industry and economic growth and expansion, I still have to be sensitive to the long-term concerns about national security, which I intend to be throughout the process.

On the general issue of export promotion, I intend to activate and energize the Trade Promotion Coordinating Committee. I understand the Committee has not had a principals meeting since its existence. It is due to report to the Congress in September on its activities. So you can be assured the Committee is going to be very active.

I am going to convene the first meeting probably next week. It is a 19-agency committee which I chair as Secretary of Commerce. There is also a new structure within the Administration, and that is a joint group, National Security Council and National Economic Council, which I also chair, on the issue of export promotion and trade promotion.

That principals' group has not yet met, but will be meeting within the next week or two to make sure that we not only give impetus to export promotion, but that we have all the various wheels of the government apparatus turning in the same direction.

I think one of the issues is resource allocation. We know that about 80 percent of our paid promotion dollars go for agriculture, and agriculture represents less than 10 percent of our exports. So we need to take a hard look at how we are spending our export promotion money. We need to ask some questions about whether we shouldn't be spending more on manufactured goods to enhance the ability of our industrial sector to compete effectively in the export marketplace.

Mr. Skaggs. Thank you. Thank you, Mr. Chairman.

Mr. Smith. Mr. Price?

Mr. Price. Thank you, Mr. Chairman.

Mr. Secretary, let me add my warm welcome to you to this subcommittee. I think for myself, and for many of us, it makes us very confident, very happy to see you and your Department at the forefront of this administration's plans for revitalizing this economy.

Secretary Brown. Thank you.

TRADE EXPORT MATTERS

Mr. Price. I would like to focus on trade export matters as well. First, picking up on the question you just broached about how those efforts can be more effectively coordinated, and then secondly asking you about a matter that, as far as I am concerned, is somewhat closer to home.

First, about export promotion in general, I have just come to this subcommittee from the Agriculture Appropriations Subcommittee, so I am aware of what you just said about the large portfolio in foreign trade that USDA has. My information is they receive at least 75 percent of the total funding for export promotion programs, but account for only about 10 percent of our exports.

Now, as you know, USDA and the Foreign Agricultural Service have been criticized by GAO and others for not doing as good a job as our competitors for promoting value added U.S. products. In fact, our Appropriations Subcommittee severely cut the market promotion program last year because it seemed that, in many cases, they were just substituting U.S. taxpayer dollars for advertising dollars that large companies had already decided to spend.

The United States and Foreign Commercial Service has likewise experienced some past difficulties. There is a statistic that is troubling, that 100 U.S. companies account for over 50 percent of all American exports, and that 85 percent of our exports are accomplished by just 2,000 companies.

I wonder if you could elaborate a bit on the way you plan to reorganize and revitalize this important area; how your efforts, for example, will dovetail with those of other agencies like the Foreign Agricultural Service.

I think this question of coordination is an important one, because these export promotion programs are spread over 10 different agencies, and funds don't seem to be allocated on the basis of any government-wide strategy. So how do we make sure that these promotion funds are being channeled into areas with the greatest potential returns, and how do we make certain that our effort is effectively coordinated?

Secretary Brown. Thank you, Congressman Price. We all talk about coordination and the need for it, and it's terribly important. Coordination takes leadership. Somebody has to see that coordination is really going on.

In the area of export promotion, I intend to take that leadership, both through the legislatively mandated chairmanship of the Trade Promotion Coordinating Committee, and by the presidentially appointed Subcommittee on Export Promotion of the NEC and NSC.

I indicated that the principals of the Trade Promotion Coordinating Committee had never been pulled together. We are going to be doing that next week, all 19 agency representatives, to talk about just those issues. How do we more effectively use and target our resources; how do we make sure that resources are allocated in such a way that it represents what our policy is as an administration.

If in fact our policy is to increase exports of manufactured goods, we ought to look at what the budget says and what kind of emphasis the budget gives, and we ought to make some adjustments, if in fact those budgetary allocations are not in line with what it is we are intending to do.

Secondly, I think a lot can be done by what we do with our trade policy, generally, and how firm we are in assuring that markets are opened for our products. Too often we have not played on a level playing field. I think we have to be careful in the way we do that.

We have to do that with a sense that our goal is to have a situation where you can have free and fair trade, and I think that the things that we do and say in that regard can provide impetus for export promotion activities.

I think we need to take a hard look at those vehicles and elements that we have in place. We have a very fine United States and Foreign Commercial Service that I think probably isn't well-known enough to the American business community. I think they do excellent work.

I just visited our trade center in Mexico City. I think all of the staff are hard working, dedicated, mission-oriented. I think we can do more if more of the business community understood what resources are available to them as they seek to get into the export market.

Further, I think that our focus, as I think I have said once or twice this morning, really needs to be on small and medium-sized companies, some of which don't even think about exports. It is not even on their radar screen, but it ought to be on their radar screen, and we ought to be proactive.

Our staff of the U.S. and Foreign Commercial Service should do more than servicing American businessmen and women when they come to foreign countries. They should be identifying the need for widgets in those countries and then getting back to us here and finding out who manufactures widgets so they can get into the export business.

That is what I call a proactive approach, and that is the approach that we are prepared to take.

Mr. PRICE. Good. I think that outreach is especially important in that attempt to reach out to small and moderately sized businesses.

Now let me focus on something in the same area, but much more specific. It has to do with a report that appeared in the March 5th edition of Inside U.S. Trade. It is reported there that in the last days of the Bush administration, I think about nine days before George Bush left office, the Commerce and State Departments established new export promotion guidelines for U.S. embassy posts abroad who are providing export assistance.

These guidelines apparently added new criteria to determine if a company is eligible for U.S. Government support. The new guidelines seemed to represent a departure from previous policy which primarily considered U.S. content as the major factor.

These additional criteria have to do with whether or not a company is foreign owned, regardless of the number of U.S. workers that it employs, or whether the products being promoted are manufactured in the U.S.

As I am sure you know, the Research Triangle area, which I help represent in North Carolina, is one of the Nation's economic success stories. A number of the companies in our area are subsidiaries of foreign entities. For example, the Northern Telecom Company manufactures high quality telecommunications equipment. They manufacture this in North Carolina. They employ 9,000 of our people. They have been very successful in the export market, particularly in Asia.

So a report like I just cited does concern me, because Northern Telecom is, as you know, a Canadian firm. Can you tell us if these reports are reliable, or if indeed the criteria for U.S. export promotion assistance have been altered, were they altered in the closing days of the administration to take these factors into account, and whether a company like Northern Telecom would be excluded from embassy assistance in running export contracts.

Secretary **Brown**. I share your concern, Congressman Price. I don't know whether they have been altered or not, but the perception is certainly that they have been altered, and if that is the perception, we certainly need to have a review of that alteration.

I know that your staff has been in touch with the International Trade Administration. I would like to participate in that meeting with you and your colleagues on that subject so that we can come to some clarity on what changes, if any, have been made, and what impact they have.

But it is a concern that I share with you, and I think we need to get together on it and see what the impact is and what we can do about it.

Mr. **Price**. So as far as you are concerned, this was a policy change that was rushed through in the closing days of the last administration; it is not one that you necessarily have embraced or even reviewed yet, but you do intend to conduct that review?

Secretary **Brown**. I do. And to my knowledge, there was no blanket exclusion of Northern Telecom, but it is something I want to look at to make sure that is the case.

Mr. **Price**. It is a question of a whole class of companies that are manufacturing in this country, employing our people, and they deserve whatever assistance our embassies are prepared to render.

Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

BUSINESS DEVELOPMENT CENTERS

Mr. **Smith**. As you can see, members of this committee are very interested in exports and technology transfer. I am glad to hear your emphasis on small business.

I was, however, you might say, shocked when the stimulus package came up, or about that time, when one of the proposals for elimination was small business development centers. They are an integral part of this whole export promotion activity. We have 720 of them in the country now. They are university-based.

We have matching funds from the various states. We don't permit governors' offices to select the candidates for help, and they are successful. And if a small business is going to operate, they must have a business plan; they must have a cash flow projection; they must have virtually everything they don't have in the Soviet Union or in Russia. That is what they really need over there is small business development centers, as much as anything.

And so I hope that there is good enough attention brought to this that you and the Administration understand now, that SBDC's are a part of this whole initiative that the Administration is taking.

Secretary BROWN. My understanding is that OMB is reviewing that matter now. I think there can be, Mr. Chairman, some potential overlap between our manufacturing extension partnership program and the——

Mr. SMITH. I agree. As a matter of fact, it is just about 20 percent of the SBDC program, and you can eliminate it. It is a surplus.

Secretary BROWN. I think we need to look at how we could locate some of these activities that might be duplicative. That is what we are doing now.

Mr. SMITH. Because the activity they have means nothing unless the small businessman has a business plan, including a cash flow projection. They must have all these things——

Secretary BROWN. Yes, the basics.

Mr. SMITH. Yes. We get help from universities at the same time that we are helping them.

With regard to Russia, as Mr. Moran said, some of us were just over there. It shows the difference between our system and their system and how important it is. Milk is about 50 rubles at the farm. And so they have reduced production by 30 percent. It sells for approximately 300 in Moscow.

So there are about five times as many people transferring it from one hand to another in between and they don't help—they don't produce anything. They don't need more people in marketing over there; what they need is more people in production. They are short on production.

And it illustrates the difference between our system and their system and why we need to be sure that we are doing this technology transfer and keeping competitive as well as helping small businesses.

Mr. Rogers, do you have another question?

Mr. ROGERS. Yes, Mr. Chairman. I will be brief.

NORTH AMERICAN FREE TRADE AGREEMENT

Mr. Secretary, the North American Free Trade Agreement has been mentioned briefly here. Some of us have some deep fears, and I know you have expressed some concerns as well. Some of us have some deep fears that much of the low technology manufacturing currently in this country would be lost to Mexico. We fear that jobs, for example, in the textiles industry, an industry of great importance to my district, would be lost to Mexico.

What is your comment about that?

Secretary BROWN. I believe that, both over the long and short-term, we will have an increase in job opportunities for American workers under NAFTA. I think that there will likely be some dislocation in some areas. I don't believe that the textiles will be hard hit in that regard based on the economic analysis that has been available to me.

I think we have to be ever vigilant of the impact on American workers, no matter what sector of the economy in which they work. This Administration is going to be vigilant. We have made that pledge throughout. There is nothing more important to our country than the working men and women who produce our products and deliver our services.

And even though the long-term impact, I think, is clearly favorable and positive, we have to be concerned about short-term dislocation as well, worker retraining, for example, and other ways to intervene to make sure there is no negative impact on American workers.

INFORMATION HIGHWAY

Mr. ROGERS. Now, you are requesting 54 million in your budget for a new program to build a so-called information superhighway. Of course, that is an extremely complex, very divisive issue, with incredibly high stakes.

The telephone companies, the cable TV companies, the computer people, among others, all want, and should play a role in a national telecommunications network. Congress has been unable to reach any sort of consensus on what role each of these players should have. We saw this last year in the battle of the baby Bells.

Don't we have to resolve those issues in order to have a national telecommunications network? Is it not premature in view of those unresolved issues to appropriate $54 million this year when we haven't reached a consensus on a telecommunications policy?

Secretary BROWN. Well, I think, Congressman, there is a difference between a policy and what technology you ultimately choose. I think the marketplace will decide that. It is not our intention to pick a technology, to pick fiber-optics, for example, which clearly has a big head start. We will be doing test beds and other things, such as testing appropriate systems and looking at how the network ought to be put together. We will see who we are trying to reach—educational institutions, libraries, hospitals, or individuals in their homes.

I think there is such extraordinary opportunity here, all of which ultimately makes us more competitive as a nation and creates more jobs for our people. So it seems to us that it is an appropriate expenditure that does not get into the kind of conflict resolution mode that you suggest, because this is not about picking a technology of one over the other, but rather about exploring options and opportunities for the future.

We will submit legislation this year for the NTIA program. We will be able to spend all of the funds requested as part of our stimulus package which we think gives the program a jump start.

EDA INVESTMENT

Mr. ROGERS. Now, you are requesting a $33 million increase for the EDA?

Secretary BROWN. Yes.

Mr. ROGERS. This increase is targetted to the impacted by the defense drawdown to help them readapt to the new world. How are you going to score those funds? Should that come out of the defense function or the domestic function?

Secretary BROWN. I am informed that they are coming out of domestic funding. Now, we are receiving some additional resources, as I think I mentioned earlier, from the Defense Department. But these particular funds are scored as domestic.

And therefore, for business development, as you know, getting small or medium-sized businesses started and enhanced in those distressed and urban and rural communities.

U.S. AND FOREIGN COMMERCIAL SERVICE

Mr. ROGERS. Let me close here with more a comment than a question. I would like your response, though.

In the past, we have had some difficulty getting the Foreign Commercial Service officers in our embassies to be able to operate as they should as promoters of American products overseas. Many times, they have been co-opted by the Department of State. The economics officers of the Department of State are there to report on the economic conditions of a particular country, whereas the Commerce Department's people are there to sell, sell, sell.

Both State and Commerce have distinct missions in these embassies, but they are not the same, and many times they even clash. It is going to take a specific agreement between you and the Secretary of State that the Commerce people will remain independent to a certain degree for operating purposes, at least, from the Department of State's economic officers.

Can you help us do that?

Secretary BROWN. Yes, I can, Congressman Rogers, and I am committed to doing that.

Mr. ROGERS. Good.

Secretary BROWN. I have been very pleased, as I am sure you have, by Secretary Christopher's comments recently, both in his congressional testimony and in public forums around the country where he has talked about the State Department as promoting American companies and industry. That is a first for a Secretary of State, I think.

I think it is in line with the Administration's view that we all ought to be pushing for export promotion. I have had a conversation with Secretary Christopher about that already. Under Secretary Spero at the State Department is going to be working with my deputies at the Commerce Department on these issues.

So I think we go at it two ways. One is making sure the U.S. and Foreign Commercial Service employees know who they work for, they work for the Commerce Department. But secondly, is also getting the State Department interested in export promotion and creating business and job opportunities for American companies and the American people.

Mr. ROGERS. I am glad to hear that. Thank you, Mr. Secretary.

Mr. SMITH. Mr. Taylor, we have all had a five-minute round.

COMPETITIVENESS

Mr. TAYLOR. I will try, Mr. Chairman. Someone asked in one of my town meetings if all I was going to do was oppose the President. I pointed out that the economy is a lot like being in the second row back in a jet plane and hoping the pilot crashes, so you can get even with him. That makes no sense at all, because we are all in this together for the next four years, and I hope the President succeeds. When he does, my constituents will succeed.

I am concerned in one area and I wanted to mention it. During our last subcommittee hearing, we had the Competitiveness Policy Council come in with a competitiveness strategy for America. You have a copy of it.

Secretary Brown. Right.

Mr. Taylor. In that, the Council makes a number of recommendations, and I will try to go over them briefly because of the time. One, it recommends creating high performance work places, and I think that is important. I have toured several plants in my district, and I think the team concept is what is working and has improved productivity and competitiveness.

I know the Administration is supportive of organized labor; I understand the striker replacement will be signed; Senator Ford, who introduced the bill, has said it will cause more strikes and will create more unrest in labor areas.

In order to have creative high performance work places, it requires intense and innovative collaboration between labor and management, according to the Competitveness Policy Council.

Much of the policy in this area that the Administration is pushing and planning to push in conjunction with other initiatives go contrary to that type of collaboration, and will that not hurt us economically? We can't always put these in a comprehensive bill.

The Council also makes a recommendation on tort reform. It points out that there are hundreds of billions of dollars of unproductive cost in the economy because of increased tort activity. In the President's State of the Union address when he was talking about health care, he discussed doctors and other health care provides, but we didn't hear much about tort reform. The past Secretary of Health and Human Services told me that he felt that tort reform would probably save between 20 to 22 percent in health care costs. I know there is a political conflict involved in enacting this type of reform.

The Council also talks about regulatory changes. It points out that excessive amounts of regulation are generating hundreds of billions of dollars in unproductive costs, and I agree.

In the area of the environment, I think we have a hysteria-driven movement that is not producing the rationale where business and industry can sit down and attack problems. I feel that this has really been counterproductive.

When you look at all of the above recommendations—and I agree with the Council's conclusions in the areas of high performance workplace, tort reform, regulatory reform, and social problems—it seems the Administration's policies seem to be going completely contrary to them.

Is there any chance that the Administration will modify those policies or am I misinterpreting the policy?

Secretary Brown. Well, Congressman, I would never want to suggest that you are totally misinterpreting anything. But I would suggest that I don't agree with your conclusions. The fact is, we are not moving in a different direction, the different one that you suggest.

I have reviewed this document as well and much of it I agree with, not every single line in it, but much of it. In that regard, the Secretary of Labor, Bob Reich and I, are convening a group of management and labor leaders this spring on just those issues, on workplace related issues.

The reason we are doing it with Commerce and Labor in a co-leadership role, is to send just the kind of message which your question suggests you would like to be sent, that there needs to be a new kind of cooperation. So I would disagree that the policy pronouncements take us down a different road.

I talked, before you came in, about our desire to build new kinds of partnerships, new kinds of partnerships between the public and private sector, new kinds of partnerships between labor and management. That is what we are committed to. I don't believe that policy pronouncements that have been articulated thus far move us in a different direction.

Mr. TAYLOR. I would like to think, Mr. Secretary, that I am wrong, but let me ask you specifically: the Competitiveness Policy Council called for an innovative collaboration between labor and management in its report.

Senator Ford has said publicly that the striker replacement bill will generate more strikes, more labor unrest, more activity, and probably make labor less willing to collaborate with management.

Is it possible that this legislation might be held back until after your talks are held?

Secretary BROWN. Well, I am not specifically familiar, Congressman, with what Mr. Ford said. I do know that the Administration is very committed on this issue, on the strike break replacement issue, and I don't foresee that policy changing at all.

I think that with the kinds of things that Secretary Reich and I are going to be doing together, that we can overcome the view that in fact you would create more strikes and more labor unrest and more division between management and labor.

I do not reach that conclusion. I think that there are many things we can do to assure that that conclusion cannot justifiably be reached.

Mr. TAYLOR. Well, I hope you are right, Mr. Secretary, because I think if we are going to be competitive, we have got to move in a very positive, cooperative manner.

Thank you, Mr. Chairman.

Mr. SMITH. Mr. Mollohan?

Mr. MOLLOHAN. Thank you, Mr. Chairman.

Mr. Secretary, I think it is fair to say that in the previous Administration, there was support for programs like the advanced technology program, which focuses basically on research. But there was a reluctance to support programs at the Federal level that would help facilitate the transfer of research and development discoveries to the private sector.

In the Competitiveness bill being formulated in the House, H.R. 820, there are two loan programs on which I would like your comments.

The Technology Loan Program will provide for the Secretary of Commerce to enter into agreements to make loans and loan guarantees to qualified small and medium-sized businesses to upgrade their technology base and perform research on advanced technologies which are close to the commercialization stage. Banks would serve as conduits for these government loans.

The Civilian Technology Development Program would establish a national program to provide long-term capital for qualified high-technology businesses through private investment companies licensed to provide private equity venture capital to companies.

If you would, Mr. Secretary, would you comment as to whether or not you support these programs, and further do you think that the Clinton Administration will pursue these two programs, should they be authorized?

Secretary BROWN. First, Congressman, I have testified in support of H.R. 820 and S.4 in the Senate. We feel very strongly that the legislation moves us in giant steps in the right direction.

On the specific loan issue, we are reserving judgment on that, as I indicated in my testimony, on H.R. 820. There are ongoing discussions within the Administration of the appropriateness of the Federal Government participating in that kind of a direct activity, although I fully acknowledge that capital, capital formation, access to capital is one of the very real problems.

The question is: How do we address that problem? We look forward to working with the staff on this issue to come to some kind of conclusion that will bring some continuity between the position articulated in the legislation and the still developing Administration position on this issue.

Mr. MOLLOHAN. Commerce is working with the authorizing committee?

Secretary BROWN. Yes, and will continue to do so, throughout the legislative process.

Mr. MOLLOHAN. Do you agree that a need exists here?

Secretary BROWN. Yes, I clearly recognize a need. The problem is with access to capital. I clearly recognize that.

Mr. MOLLOHAN. As you continue your discussions with the authorizing committees, are you debating whether to have loan programs or are you discussing what form a loan program should take?

Secretary BROWN. I think it is in what form you make capital available to small and medium-sized businesses, whether it be through a loan program or other kinds of programs that are already in existence, how we go about it. I think the administration clearly does recognize the capital formation and capital access problems.

Mr. MOLLOHAN. I was going to ask you for your comment about the levels at which this legislation would propose funding. But if you haven't come to specific terms on the programs, then I think maybe we should wait until you do that.

Secretary BROWN. Thank you.

Mr. MOLLOHAN. You were asked a number of questions about exports and you spoke pretty completely about that issue. So let me just encourage you to look at how coordination can be affected between State Department and Commerce on promoting exports abroad. Commerce has the Foreign Commercial Service and its commercial officers located at foreign outposts. The FCS and State Department officers perform similar services. Secretary

Christopher has committed to in cooperate with you and I believe that this is a wonderful opportunity to improve the complementary relationships that, by definition, exists.

OVERSEAS INFORMATION SERVICE SUPPORT

With that, let me turn to a related issue. I would like to know if you have examined the information services and logistical support needs of the American business community overseas. I know when I work with my businesses back in West Virginia on exporting their products, one of the primary problems they have is gaining an appreciation for the opportunities that exist. Once they receive an appreciation for the opportunities, they are quick to learn how to export. But it is that first hurdle of understanding the opportunities which poses the greatest challenge.

What kind of support services do you envision providing to small businesses throughout the country to help them with their interests in exporting?

Secretary **Brown**. Although we have not done a complete review yet, I certainly am cognizant of the problems and issues. I think we can do a better job of providing those kinds of support services, and as soon as we have completed a review, we will be making some recommendations on how to do that.

Mr. **Mollohan**. Okay. Thank you, Mr. Secretary.

Mr. Chairman.

Mr. **Smith**. Mr. Moran?

DEFENSE CONVERSION

Mr. **Moran**. Mr. Secretary, I would like to ask you a bit about defense conversion. There seems to be two aspects of defense conversion, one focus on converting factories and machinery, the old notion of converting swords into plow shares, using much the same people and the same processes of industrial production.

But there is another aspect of defense conversion, and that is finding civilian application of the software and the technological products of the $30 billion annual investment in research and development that we have committed over the last decade through the Department of Defense.

The Center for Strategic and International Studies did a complete examination of that aspect and found that it was extremely difficult to be able to use the products of that defense R&D effort toward civilian application. There were restrictions on the firms that had developed products through DOD, and on marketing those products commercially. Any number of standards and restrictions that are necessary for DOD contracts means that the enormous investment, the almost exclusive Federal investment in R&D, is not going to reach its potential in the civilian market.

But it would seem that the Commerce Department has a role to play in remedying this situation. It is a quite different role than taking the people and the machines that were used and finding other uses for them. This is the role of taking that R&D and enabling us to get the maximum commercial development of those products.

What are you doing in this. The use of the computers and the software and all of the high technological product that has been used by our intelligence agencies and our different branches of the Defense Department? What are you doing to enable us to apply that to the civilian sector, Mr. Secretary?

Secretary BROWN. We have already begun our conversations with Director Woolsey and with officials at the Defense Department about how to do a better job there. You are right. Defense conversion needs to be looked at in a much broader context than just what happens in communities around defense facilities, and you are absolutely right in focusing on software.

As you well know in the private sector now, particularly with high tech companies, with start-up companies, it often is the case that more money is invested in software than in hardware, and it is something that we need to start thinking in terms of, changing the way we think about investment.

So it is something we are just getting a start on, but I think you are right in identifying it as an appropriate issue to cause us to look at defense conversion in the broader context.

Mr. MORAN. There seems to be a natural tie-in with the information highway, the telecommunications effort, and I would hope that there would be a close inter-working relationship between Defense and NIST in that regard, and obviously with DARPA. Mr. Mollohan got into that a bit.

But DARPA certainly doesn't have a firm grasp of what it is going to be, vis-a-vis NIST, and there seems to be a fair amount of competition going on as to which role should be played. So I strongly encourage Commerce to play lead role in that respect.

Thank you.

Mr. SMITH. Did you have any other questions?

CREDIT

Mr. TAYLOR. I do, Mr. Chairman.

Secretary Brown, you have discussed the issue of credit, and I appreciate the Administration trying to reduce bank regulations into more realistic positions. Mr. Bush tried to do the same thing, and was universally ignored.

Could you tell me how this Administration is going to change the attitude that developed over the last several years toward small business, which is really where the capital problem is. I believe we do not need to form an independent bank or another series of banks or something to duplicate what FHA & other agencies already do.

Out in the field, bankers are severely penalized for taking any risky loan for fear that it will deplete their capital reserves. It is the heart of where the problem lies.

Is there a specific way that you can monitor that or follow up after the Administration's statements?

Secretary BROWN. Well, Congressman, as you know, the President has been very vocal on this issue, and I know that Secretary Bentsen and his team are working hard on it to come up with ideas to free capital.

As you correctly point out, there are a lot of financial institutions that have capital, but are afraid to lend it, and we certainly have to change that mindset. Some of it is regulatory, some of it is jawboning, some of it is trying to establish new kinds of priorities, and that is ongoing within the Administration.

I would say, though, Congressman, that we are committed to the concept of community development banks, which as you know, is part of the President's economic plan. There is discussion in the Administration now as to how they fit in to the system generally, what their specific role is.

But we know that they have worked in other communities, the South Shore, for example. Chicago is one that the President has talked extensively about. We think the experience can be replicated, not in any way to compete with existing financial institutions. This is kind of a new opportunity and a new arena that we think deserves and needs exploration.

Mr. TAYLOR. Could you tell me, Mr. Secretary, how those community banks would differ from state housing corporations, the Farmers Home Administration that gives rent supplements and other types of loans, such as the SBA's two-pronged loan programs.

How will the community banks' function differ from resources in existence?

Secretary BROWN. First of all, those generally, Congressman, have very narrow mandates. These community development banks would have broad mandates and the whole purpose would be assistance to medium and small businesses in distressed communities.

We think that there is a role for these banks. We think you are correct in raising the potential for overlap. It is one of the things that we are concerned about. We are looking hard at making sure that there is not duplication of effort. Our conclusion thus far is that there is not duplication, that there is a big gap out there.

I think you look at the Los Angeles situation and how long it has taken us, over a year with very little appropriate activity, to rebuild that community. One of the problems that has been raised there I think could be addressed with community development banks.

Mr. TAYLOR. FHA offices are being closed all around my district. I objected and have kept some open, but not successfully everywhere. Will we be closing more of those offices and moving towards community banks as a replacement, or will they work together?

Secretary BROWN. I think it all depends on the community. As you know, the Farmers Home Banks are in the jurisdiction of the Agriculture Department, so I am not totally familiar with that process.

Mr. TAYLOR. Sure.

Secretary BROWN. But we certainly are going to have to have a lot of communication within the Administration, there is no question about that.

Mr. TAYLOR. I have one final question, and it is not totally under your jurisdiction. The Community Reinvestment Act, a well managed piece of legislation in 1977, does not help minorities, and it creates a lot of use of funds and activities.

I would appreciate the opportunity sometime to sit down with you or other Commerce Department officials and bring in minorities from my community, bipartisan, who can tell you exactly what I am saying. The CRA is a policy that was meant to do well and has gone awry.

I wish we could address this, especially for smaller institutions that are using a lot of their resources in bureaucratic paperwork and really doing nothing to help their communities. There are some good programs available for those communities, but not under the Community Reinvestment Act, and it may in fact be stopping some of those programs.

MINORITY ENTREPRENEURSHIP

Secretary BROWN. Well, as you know, Congressman, the Minority Business Development Agency is part of the Commerce Department. We think we need to enhance its role in minority entrepreneurship. The whole Mega center concept that we have seen work well elsewhere, which is kind of a one-stop shopping for minority businessmen and women, is an important concept.

We have asked for, I believe it is 5 million additional funding for MBDA in the fiscal year 1994 budget as a demonstration of our commitment to minority business development.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. SMITH. Mr. Price?

Mr. PRICE. Thank you, Mr. Chairman.

ADMINISTRATIVE SAVINGS

Mr. Secretary, I think we are nearing the end of what has been a very productive and encouraging hearing. In light of that, I would like to give you an opportunity to comment on the last couple of pages of your testimony where you talk about the need to achieve administrative savings, to pare back less critical programs, even as we are increasing investment in critical areas.

We passed in the House last week a far-ranging budget resolution which aims, first of all, to spend less, but secondly, to spend what we do spend more intelligently. And sometimes those two goals, the goal of deficit reduction and the goal of strategic new investments are presented as opposing goals.

But what I think our budget resolution underscores is that they are not opposing at all, that they are really complementary goals, that both in reducing the deficit and in making these strategic new investments, we are aiming at a revitalized economy. That is the point of the whole exercise.

Your Department clearly is going to be central to both aspects of that. You are going to be cutting back on less critical expenditures; you are also going to be at the forefront of some of these new investments.

So I would like to give you an opportunity to comment on the balance that you are striking here and where you plan to achieve savings and also where you plan to be in this reordering of priorities.

Secretary BROWN. Well, Congressman, you raise an important issue. I think the Administration has a big advantage in dealing with those issues, because we started our first several weeks in office dealing with the President's economic plan, which meant that at least those of us on the National Economic Council, but I think the entire Cabinet, had to really focus on resolving those issues: How do you balance one against another? How do you make the tough decisions?

Reordering priorities is very difficult. It means, in many cases, urging the elimination of some things that might have been close to your heart. But on objective evaluation, you conclude that they don't do what they are supposed to do. They don't have the kind of impact they are supposed to have.

The very purpose of making those hard decisions is so that you can reallocate resources to things that do what they are supposed to do and do have impact on the lives of real people out here across America. So those are the kinds of decisions that were central to the Administration's initiation, so to speak. I think that makes us prepared to grapple with those issues down the road.

We think we have begun to do that in our budget presentation to your committee, Chairman Smith. Making these reallocation of resources decisions shows you can simultaneously reduce costs, tighten your belt, and make critical personnel decisions on reductions where appropriate. It also allows making long-term investment decisions in the economic interests of our country to produce jobs in the private sector, where the jobs ought to be.

That doesn't mean it is easy. It doesn't mean there doesn't have to be constant discussion and dialogue. Because sometimes two people can review programs and come up with different conclusions. And ultimately, it becomes using informed judgment to make those decisions, and that is what we are attempting to do through the budget process, through policy pronouncements, through the way we attempt to tackle problems and issues.

Mr. PRICE. Thank you very much.

Thank you, Mr. Chairman.

Mr. SMITH. Mr. Mollohan had another question.

Mr. MOLLOHAN. Yes, Mr. Chairman. Thank you.

INFORMATION HIGHWAY GRANTS

Mr. Secretary, I, for one, was extremely pleased to see the request for the National Telecommunications and Information Administration's information highway grants in the stimulus package. And I note that in the FY 94 request, Commerce has requested $95 million for NTIA, of which fifty-one million would go towards a new line item for information highway grants.

The "last link" issue for the national information highway infrastructure is one that has concerned me as I watch the implementation of the High Performance Computing and Telecommunications Act.

In your fiscal 1994 request, I see Commerce staking out a significant role in providing a vehicle for schools and libraries and governments and other public information producers to interact effectively on NREN.

Will you elaborate on this new NTIA activity? Do you see the NTIA playing an increasingly significant role in the information highway development over the next four years.

Secretary BROWN. I do, Congressman, and that is exactly why we have made the budget request that we have made, even in the stimulus package, because we wanted to jump start this activity. And certainly in 1994——

Mr. MOLLOHAN. You do jump start it?

Secretary BROWN. Yes, we do. We are talking about $54 million in 1994, going to $150 million in 1995. So we do see ourselves and NTIA specifically playing an increasingly important role in developing this information superhighway.

Mr. MOLLOHAN. In the stimulus package, Commerce's emphasis seemed to be on funding proposals already in the pipeline. With regard to this new NTIA program, it strikes me that there are advantages and disadvantages to funding proposals in the pipeline.

The historic disposition of NTIA has been toward traditional PTFP grants. Don't you believe that many of the good ideas for information highways are not currently sitting in the NTIA pipeline? Do you agree that with a new program like this, there are distinct advantages to going out with a new RFP?

Secretary BROWN. There are. And the 1994 request is for new programs. It is separate from the current PTFP program. The new program will focus on expanding our activities, not only to include education, but to include health care and public information, as well as evolving technological areas such as digital libraries.

So we are looking to new efforts, many of which are not in the pipeline as was the case in the stimulus program.

Mr. MOLLOHAN. Will you be going out with an RFP for the money requested by NTIA in the stimulus package?

Secretary BROWN. A second RFP this year.

Mr. MOLLOHAN. As well as for money that you are requesting for 1994?

Secretary BROWN. That is correct.

Mr. MOLLOHAN. Will all the money go to the proposals from the new RFPs or will any money go to proposals in the pipeline?

Secretary BROWN. I will have to check what is in the pipeline, but I know we are going out with another RFP process.

Mr. MOLLOHAN. Thank you, Mr. Chairman.

Mr. SMITH. Mr. Moran?

Mr. MORAN. If I could ask some follow-up questions on that very subject.

I was also struck by the fact that you are doubling the budget for NTIA, but yet we have no regulations ready. I don't know that we even know whether we are going to make it 100 percent publicly financed, or whether it is going to be a public/private venture.

The thing that I have the most question about is, it seems the emphasis is on the connections with the hospitals and the schools and the universities and libraries and so on, but not as much on the hub, the actual switching station.

The Library of Congress seems to be envisioned as the principal source of this information. But I don't know how the Library of Congress could accomplish that, even physically or with the personnel it has.

Have you considered the development of a NAGL Technology Center which would be the hub, the switching station for this information highway?

Secretary Brown. Well, let me respond first to your earlier questions about the match. It is usually a 50/50 match, but can go as high as a 75/25 match. We need new legislation next year, and that probably ought to require a match.

Mr. Moran. So that the 1994 money is going to implement the newly legislated program, and can't be spent until we get that new authorization?

Secretary Brown. Yes, we can spend the stimulus money under existing legislation however, we need additional authorizing legislation to spend the money that we are requesting after the fiscal year 1994 starts. We need new legislation in order to expand the program to be able to award grants to include not only education, but also health care entities.

Mr. Moran. For fiscal year 1995?

Secretary Brown. Yes.

Mr. Moran. Now, how about the National Technology Center concept. Are you talking about the Library of Congress being the hub for this information highway, the switching station, if you will, or what—how are you going to develop the actual switching station as opposed to the connections with the hospitals and the universities?

Secretary Brown. Well, we are not considering the Library of Congress an option. And the hub concept is not yet a part of our decision-making. We think that it is something that clearly has to be explored. I think we are moving off into new ground here, which is going to take some new and creative thinking, and we are in the process of doing just that kind of thinking.

Mr. Moran. Okay. We had some concern over the stimulus package, how we are going to be able to fund all that effectively without much of the structure being in place.

Thank you, Mr. Chairman.

Mr. Smith. Did you have another question?

Mr. Taylor. No, Mr. Chairman.

Mr. Smith. Well, as you can see, this committee is very interested in the Department of Commerce, and I think it has been a very productive session. I just have a couple of comments on some things that were brought up.

One, with regard to cutbacks in defense-related industries and bases, as one who has been through both, the loss of an aircraft engine factory and the loss of a base, if the land can be transferred readily, and it usually can't, the loss of a base isn't all that much of a loss.

What is really the loss is when you lose jobs in a production industry. You don't have anything to offset. But we do need to do something about getting that land transferred out there to where it can get into productive use more rapidly.

With regard to these defense plants, as we brought up before, they are all over the United States; they are not identifiable. They are in every community in the United States, because they have been assembling components, just like private industry has.

With regard to access to capital, I have been on the Small Business Committee for 27 years and was involved in some small businesses before I came here. And I can tell you that three out of four of the companies are high risk when they start, and three out of four of them fail. The ones that become successful and employ people in any significant numbers have been high-risk companies.

People hesitate to go into a high-risk investment where they are going to pay a substantial percentage in taxes when they sell it 5 or 20 years down the road, if they have to pay taxes on the inflation that is represented in that sale price.

What I am getting at is, if we are going to encourage people to make high-risk investments on a long-term basis, we are going to have to index capital gains. It is just essential. I know that a lot of people don't understand that and disagree with it. As a matter of fact, a lot of Democrats do. But you just have to index capital gains if you are going to encourage people to make long-term investments.

Now, they will make short-term, you know, a year or two or three, but that isn't what we need. We need some people to go into some of these high-risk areas that have some good ideas.

But anyway, as is apparent here, this subcommittee will cooperate with you in every way we can, and we do appreciate you coming.

Secretary BROWN. Thank you very much, Congressman Smith, Mr. Chairman, and members of the committee. It has been a pleasure and an honor for me to appear before you today.

Before I leave, I notice that I neglected to introduce some of my staff that was so instrumental in helping us put together our presentation today. I think Sheila Anthony is still here, who the President has expressed his intention to nominate as Assistant Secretary of Commerce for Legislation and Intergovernmental Affairs.

Leslie Doggett, who is sitting in the front row, who has done a truly outstanding job with USTTA. She runs travel and tourism for the City of New York, and I am trying to twist her arm and convince her to stay with us in a very high-level position at the Commerce Department.

Loretta Young, who is running our MBDA program, and Joyce Walker, who has been instrumental in helping us put together our budget presentation. I didn't want them to go unrecognized.

But thank you very much for the opportunity to appear before you.

Mr. SMITH. Thank you.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE

Manufacturing Outreach

QUESTION:

You are requesting an increase under the National Institute of Standards and Technology (NIST) for what had been called the Manufacturing Technology Centers. Your FY 1994 initiative refers to the Manufacturing Extension Partnership (MEP) Program. Please briefly explain for the Subcommittee the fundamentals of the MEP program -- how many additional centers would be funded (in FY 1994 and beyond), where would these centers be located, how would state and local governments be involved, and what would be the delivery mechanism for conducting the manufacturing outreach?

a. To what extent will these proposed centers rely on existing Federally-supported programs to deliver the manufacturing assistance?

b. What steps are you taking to avoid duplication of existing business assistance delivery systems in developing your MEP proposals?

c. Is your proposal consistent with the legislation being considered by the Science and Technology Committee for technology promotion assistance programs? If not, what are the differences?

ANSWER:

The Manufacturing Extension Partnership (MEP) consists of the following components:

Manufacturing Technology Centers (MTCs). The existing seven MTCs provide us with a good base of understanding, and their diversity illustrates our commitment that each MTC will be locally-defined and be structured to suit the actual needs of the region it serves. Future MTCs will be located where there are substantial concentrations of manufacturing firms.

Manufacturing Outreach Centers (MOCs). The MOCs will offer a range of services similar to those provided by MTCs, but they will be smaller and will serve regions with lower concentrations of manufacturers. At present there is no funding for MOCs, but we have tested the concepts in regional offices established by some of the present MTCs.

The MOCs will be built primarily on existing organizations.

State Technology Extension Program (STEP). We foresee expanding STEP so it can provide funding under cooperative agreements to states which make sound proposals to build or strengthen an industrial extension infrastructure. We also think it is important to help states obtain the technical support they need, and to build linkages with other states in their regions for joint industrial extension activities.

Networking and other linkage mechanisms (LINKS). An effective nationwide extension program requires systematic approaches to communication among service providers (centers), organized access to technology sources, uniform training of field agents and uniform evaluation of the effectiveness of the services provided to client firms.

The MTCs and MOCs will be selected based on merit in an open competitive process, as has been done in the previous three competitions for MTCs. NIST has used the Manufacturing Studies Board of the National Academies of Sciences and Engineering to perform technical reviews of all the proposals. These reviews are published for the benefit of all proposers. Our selection criteria require that proposers demonstrate close linkages with state and local economic development, industrial extension, and related organizations. The proposers define the delivery mechanisms they believe to be most effective for their target population. NIST encourages potential proposers to review the approaches that have been successful at other centers, and in fact in most cases during the proposal preparation process, proposers visit existing centers to learn about their experiences.

a. The centers must form close linkages with existing Federally-supported programs, both for extension and as technology sources. There are strong working relationships with the national laboratories, for example.

b. MTCs work closely with Small Business Development Centers, and in some cases have co-located personnel. We have found that when working with a small or medium sized company on a technology issue, they also need help with management, workforce organization and training, shop floor layout and materials flow, financing and business guidance, and related matters. The MTCs provide access to these services through linkages with other organizations, thereby giving the client firm a "one stop shopping" interface while avoiding the duplication of services. This has worked well.

c. Our plans are consistent with the legislation being considered by the Science and Technology Committees. The results of our experience match the thinking of the drafters of S.4 and H.R.820 in terms of design of the nationwide system, and DoC fully supports the parts of those bills which deal with manufacturing extension.

QUESTION:

The FY 1993 Defense Appropriations Act included $1.2 billion for defense conversion efforts. I understand that some of these funds (up to $125 million) will be used to initiate some form of the Manufacturing Extension Program. You say in your statement that programmatic details have not been finalized, but could your describe for us your recommendations on how these FY 1993 funds should be used?

a. What steps will you take to assure that the FY 1993 DoD funds are not used in a way that undermines the Commerce plans for an expanded manufacturing outreach program?

b. Will NIST have a direct role in administering the FY 1993 funds? If so, will additional administrative support costs be covered from within the defense conversion funds?

ANSWER:

The technology portion of the FY 1993 defense conversion appropriation is being managed by an interagency working group consisting of DOC/NIST, DOD/ARPA, DOE/DP, NSF, and NASA, chaired by ARPA since it is their appropriation. NIST has played a key role in defining the programs, selection criteria, and illustrative examples for the technology deployment part of this program (which includes all the manufacturing extension activities). The competition for these programs is being managed by the interagency working group up through the selection of winners. Each selected proposal will be assigned to one of the participating agencies for contracting and management. Because NIST has significant experience in manufacturing extension, I expect that the many of the winning manufacturing extension proposals will be assigned to NIST for contracting and management. In addition, other appropriate projects will be assigned to NIST.

a. In the area of technology deployment the interagency working group has designed the programs, selection criteria, and illustrative examples to assure that no conflict will be created with the planned Commerce programs. This has been a conscious and focused effort, and NIST believes it will be successful.

b. NIST will have a major, direct role in administering the FY 1993 funds. While no formal agreement has yet been executed to this effect, we expect that the management costs for this program will be covered from within the defense conversion funds.

Economic Development

QUESTION:

You indicate in your statement--as you did at the hearing on the economic stimulus package--that the Economic Development Administration will be a "cornerstone" for the Commerce Department, and that you seek to "reinvigorate" EDA to carry out its expanded mission. What management changes will be necessary to achieve this reinvigoration?

a. For the past few years, this subcommittee has earmarked funds in the bill for maintaining the 49 economic development representative (EDR) positions nationwide. Have you had an opportunity to examine the role of the EDRs, and do you propose to continue support for these positions?

b. The Subcommittee denied a proposed reorganization of EDA earlier this year, preferring to wait for the new Administration to come in and take a look at any necessary organizational changes. Have you had an opportunity to examine EDA's organization, and do you plan to resubmit the proposed reprogramming?

ANSWER:

Over the next several months, the Department will conduct a review of EDA's mission, programs, resource allocation, and authorizing legislation to determine what, if any, changes are necessary to more effectively and efficiently carry out the President's economic policies. At the conclusion of that review, the Department will submit any legislative proposals or reprogrammings needed to make the necessary changes.

a. As part of our review, we will examine the role of the EDRs. At this time, however, the Department plans to continue to support the 49 Economic Development Representative (EDR) positions.

b. Once a new Assistant Secretary for Economic Development is in place, EDA will determine if the reprogramming to consolidate the Credit and Debt Management Division with the Liquidation Division and the Planning Division with the Technical Assistance and Research Division will be resubmitted.

QUESTION:

A major emphasis of your economic development proposal is defense conversion. The Congress provided $50 million in FY 1991 and $80 million in FY 1993 under Defense Appropriations Acts for similar purposes, and most of these funds have not yet been obligated. How does the program you are including in the Commerce requests--both FY 1994 and in the FY 1993 stimulus package--differ from the funding currently available to EDA for defense conversion?

ANSWER:

A few comments on the obligation of FY 1991 and FY 1993 defense conversion funds are necessary to dispel concerns that EDA is not moving quickly to get those funds out. First, EDA received the $50 million in February 1992, some 17 months after the beginning of fiscal year 1991; the next installment of $80 million was received in EDA in March 1993, some six months after the beginning of fiscal year 1993. Second, to date, the major emphasis of the defense conversion initiative for communities affected by base closings has been base reuse activities. By their nature, the development of such projects is very time consuming. Even with these delays, EDA has now obligated $22 million and is reviewing proposals totalling an additional $39.6 million.

In contrast, the funding requested for FY 1994 will not be limited to base conversion activities, rather it will be used to help communities develop other special economic adjustment projects that are needed to respond to a variety of defense/economic dislocation events. Examples of projects we are reviewing include the following:

- revolving loan fund programs that assist defense-dependent business to diversify and retain employment or hire displaced defense workers;

- construction of water lines and a reservoir to serve former defense contract firms currently on well water and unable to expand;

- building renovation, equipment and training for an Indian-owned defense contractor to enable the company to pursue non-defense contracts;

- provide public works improvements and technical assistance to a community impacted by the reduction of operations at a Department of Energy facility.

Advanced Technology Program

QUESTION:

You mention that you are proposing an increase of $132 million in the Advanced Technology Program (ATP) under NIST -- to bring the program up to a $200 million in FY 1994. Are any particular changes in the focus of the program being proposed for FY 1994?

ANSWER:

The ATP will not make any major changes in its scope or focus. The increased funds will be primarily used to hold multiple competitions per year including at least two that are open to proposals in all areas of pre-competitive generic technology development. Some of the funds will also be used to support a series of technology-specific competitions. NIST will work with industry and other parts of the federal government to define broad technology areas for these competitions, taking into account information gleaned from past program experience. The focus will be on broad technology areas that have significant potential for enhancing long-term U.S. economic growth and employment. The increase would enable nearly 120 additional new projects to be funded in FY 1994. In the first 3 years of the ATP, 60 projects were initiated.

QUESTION:

You cite some ATP "success stories" in your prepared statement. What mechanisms exist for the evaluation of ATP grant recipients -- how can Commerce ensure that taxpayers are seeing some return on their investment in commercializing new technologies? Can that return be measured in terms of job creation?

ANSWER:

The ATP has implemented a comprehensive plan for evaluation that consists of the following four elements: (1) monitoring the operational effectiveness with which the ATP is administered; (2) developing statistics on applicants, recipients, technologies, and projects; (3) tracking short-to-medium term impacts of funded projects; and (4) measuring long-term impacts of funded projects. The first element of the plan ensures a well-run program by making sure that the activities are well matched to the mission, and that the activities are carried out in an efficient, effective manner. The second element of the plan provides the overview required for strategic management and to ensure that the program complies with specific legislative directives, such as appropriate participation of small businesses. The third element of the plan enables ATP to assess scientific and business developments over the lives of the projects, to determine if the projects are on track; and to take quick, appropriate corrective action if they are not. The fourth element--which cannot be implemented until projects complete the R&D stage--will allow ATP to assess the long-term success of individual projects, including long-term employment effects. These four elements of program evaluation are carried out primarily through analysis of internal data, company quarterly reports, third-party interviews and surveys, and detailed case studies.

Some early results are available on employment effects: 65% of first-competition award recipients attributed the hiring of additional scientists, engineers, and technicians to receipt of the ATP award, and 35% attributed the retention of such jobs that otherwise would have been lost. In the current R&D phase of the projects, the primary employment effect of the ATP is on R&D personnel. Much larger and broader employment impacts are expected as projects move into the commercialization phase, at which time workers will be needed to meet requirements for production capability and wholesale and retail distribution networks.

Although not all of the projects funded will achieve their full commercial potential, the commercial success of even a few of the ATP-funded projects has the potential to compensate, many times over, for those that do not fully succeed. Commercial success will mean new-to-the-world and improved products and processes; new and expanded companies, industries, and markets; and the generation of jobs and tax revenue. The plan in place will allow us to measure the average return to taxpayer investment.

In addition to its evaluation efforts, the ATP has a number of built-in features in the selection and oversight process that also help to ensure efficiency and effectiveness in the program, and to guard against waste to the taxpayer. Only projects are funded that have a high potential for very large and wide-spread benefits for the U.S. Projects are conceived and carried out by companies that share the costs and have a vested interest in the success of the projects. Selection of projects for funding is based on a fair and rigorous review by technical experts and private sector business experts to ensure that only projects that have both scientific/technical merit and business merit, including a strategy for timely commercialization, are funded. ATP monitors project developments on an on-going basis; extensive procedures are in place for the timely audit of projects; and it is possible to terminate projects quickly if satisfactory progress is not made.

QUESTION:

I note that in your statement, you refer to changes in trade and procurement policies that will help establish "a more fertile environment for innovation and investment". What are these changes that you are supporting, and how will the Commerce Department be involved in the implementation of these changes? How will these proposals specifically relate to the Advanced Technology Program?

ANSWER:

With regard to the impact on ATP of a more fertile innovation and investment environment, it is expected that an improved environment would increase the success of the program. The ATP provides funds on a cost-shared basis to companies for development of innovative high-risk technologies that could be incorporated into many products, services, or end-use applications. ATP funding ends before specific product development and commercial applications begin. To the extent that the general investment environment is improved through the adoption of R&E tax credits and other macroeconomic initiatives, ATP award recipients will find it much easier to obtain capital needed to finance specific product development, manufacturing, and commercialization of the technologies that were developed with the partial support of the ATP.

The International Trade Administration develops policy to address international trade barriers; conducts outreach programs to promote U.S. exports; and monitors foreign compliance with U.S. trade laws and international agreements, seeking remedial actions when foreign violations occur. By strengthening domestic industry, U.S. firms will be able to compete more effectively in the overseas markets. To highlight ongoing major activities, we will continue to support and participate in the Uruguay Round of GATT negotiations; expansion of the GATT Government Procurement Agreement which will open multi-billion dollar procurement markets in signatory countries (e.g., the European Community, EFTA, Japan, Canada, Israel, Hong Kong and Singapore) to U.S. suppliers; supplemental agreements to NAFTA; negotiations regarding proposed free trade agreements with Latin American countries; continual monitoring and negotiations with the Government of Japan; and promotion of market reforms in the Newly Independent States (NIS) of the former Soviet Union. Through our outreach programs and business information centers, U.S. firms are provided with the latest information on trade and investment opportunities throughout the world.

Weather Service Modernization

QUESTION:

Current authorization for the weather service modernization program requires certification of the performance of new weather stations to occur before "old" stations can be phased back. Have you reviewed this requirement -- this very expensive requirement -- and will you make any recommendations to the authorizing committees to modify the certification requirement?

ANSWER:

Current authorization for the weather service modernization program does not require certification of the performance of new weather stations to occur before "old" stations can be phased back. Public Law (P.L.) 102-567 requires that the Secretary of Commerce certify that the services will not be degraded in the affected service area of an "old" station (field office) as a result of closing, consolidating, automating, or relocating an "old" station (field office).

The National Weather Service (NWS) has conducted an extensive review of the impacts of P.L. 102-567. The NWS National Implementation Plan describes a two-staged approach to the Transition. Stage I involves the implementation of ASOS and NEXRAD. As this stage progresses, relocation, automation, and consolidation certifications will occur. Staffing will be reduced at field offices, specifically Weather Service Offices, but in keeping with P.L. 102-567, no office will be closed prior to January 1, 1996. Stage II involves the implementation of AWIPS and as this stage progresses, and after January 1, 1996, closure certifications will occur.

P.L. 102-567 may result in an increase in cost of as much as $60 million to the transition. These costs result primarily from an overall projected program delay coupled with individual delays associated with Stage I relocation, automation, and consolidation certifications. The overall program delay results from the pre-certification requirements of the law: review of the modernization criteria by the National Research Council, publishing the proposed modernization criteria in the Federal Register, review of comments and consultation with the Modernization Transition Committee, and establishment of the Modernization Transition Committee. All of these activities must be completed prior to

October 29, 1993. Allowing for these additional requirements to be implemented up front will cause the NWS to keep non-NEXRAD offices open longer and to hold augmentation staff longer than originally planned, thus adding to the cost of the overall program.

Five months have passed since P.L. 102-567 was enacted. During this time considerable progress has been made on meeting the pre-certification requirements. The National Research Council is completing its review of the modernization criteria and the Charter for the Modernization Transition Committee is in the approval process. The Administration does not anticipate recommending any modifications to the certification requirements at this time.

QUESTION:

You are asking for an increase of $217 million for the modernization program in FY 1994, which you say represents the "high water mark" in NWS modernization funding. What are the projected outyear costs of this program, which specific pieces of the request decline after FY 1994, and what will be the impact on the program if the full request is not provided?

ANSWER:

FY 1994 is the "high water mark" of modernization funding. As can be seen in the attached table, the overall requirement for weather service modernization declines by approximately $96 million dollars in FY 1995 and by an average of $134 million for each year during the period FY 1996 - 1998 when compared to the FY 1994 request. This reduction is due to "spin-down" of three major modernization programs: NEXRAD, Weather Forecast Office Construction, and ASOS. Also, in this current schedule, both MARDI and AWIPS/NOAAPort will begin their "spin-downs" in FY 1998.

The President's request represents the absolute minimum funding required to continue the modernization according to current plans and contracts. Should full funding for these programs not be provided in FY 1994, the resulting slip in delivery schedules for major systems associated with the NWS modernization effort will result in major outyear costs (a renegotiation of the NEXRAD contract by itself has been estimated at over $200 million of increased costs to the program), an out-of-phase schedule which would have weather offices completed with no equipment or personnel, delay in the delivery of benefits to the Nation of already proven superior weather monitoring and forecasting equipment, and increased costs associated with maintaining outmoded and failing equipment until replacements arrive.

WEATHER SERVICE MODERNIZATION
($000s)

Program	FY 1993 Approp.	FY 1994 Request	FY 1995	FY 96-98
NEXRAD	$84,516	$123,545	$56,641	$79,359
WFOs	49,295	62,784	14,739	6,200
ASOS	18,000	18,135	9,965	15,420
AWIPS	23,779	43,564	46,550	248,635
Class VII	7,826	14,600	13,874	33,350
MARDI	23,316	75,813	84,895	188,865
GOES	118,000	182,746	151,558	309,949
POLAR	148,432	162,099	209,118	766,692
Total	**473,164**	**683,286**	**587,340**	**1,648,470**

Administrative Savings

QUESTION:

You mentioned in your statement that the FY 1994 request includes a reduction of more than 900 FTE below the Department's total FTE level for 1993. How are you able to accommodate such a large reduction in FTE while experiencing growth in other programs?

ANSWER:

The FTE reductions were taken through a combination of actions including eliminating unneeded FTE due to completion of the 1990 census, reducing PTO FTE based on revised requirements, eliminating FTE no longer required for reimbursable programs and eliminating FTE associated with program reductions. The balance of the FTE were taken out as across the board cuts in areas not included in the President's investment programs.

QUESTION:

Will passage of the economic stimulus supplemental impact your planned FTE reductions?

ANSWER:

Passage of the economic stimulus supplemental will not impact the Department's planned FTE reductions. The Department's FTE reductions were based on the assumption that the FTE required to implement the stimulus proposal be found within the Office of Management and Budget 1993 FTE allocation. New FTE for the stimulus supplemental are principally available from redirection of reimbursable FTE.

QUESTION:

What will happen if your assumptions on reimbursable FTE do not materialize?

ANSWER:

The Department anticipates reducing its reimbursable FTE substantially in 1994 (approximately 561). With the new priorization within the Department, we feel that the Department will be able to achieve this reduction.

QUESTION:

This Committee had to take some rather serious reductions to some of the Commerce Department's base programs in order to live within our funding allocations for FY 1993. Were these previous reductions to your base taken into account in developing the administrative cuts you are proposing for FY 1994?

ANSWER:

The 1994 administrative cuts were developed using the 1993 enacted level as its base; therefore, previous reductions to base were previously included prior to developing the administrative reductions.

Critical Vacancies

QUESTION:

Although a few names have been discussed as potential nominees for critical Commerce Department under secretary and assistant secretary positions, we have yet to see a comprehensive list of Commerce nominees. What is the current status of the nomination process for the Commerce Department, and when can we expect to have policy positions filled with Administration appointees?

ANSWER:

The identification, selection, background investigation and nomination of individuals to senior policy level positions is a critically important task for the Administration. We are moving as quickly as possible gien the sensitivity associated with appointments to these positions. The Committee will be kept informed of our progress in nominating the best-qualified individuals to fill these positions.

Trade Policy

QUESTION:

One of the criticisms (for lack of a better word) of the new Administration has been over the lack of defined trade policy. Your Department (as well as the U.S. Trade Representative and the State Department) has the responsibility for carrying out the various pieces of the Administration's trade policy. One area that would seem to be particularly dependent on a defined trade policy is the Import Administration under the International Trade Administration.

a. How does this lack of a specific trade policy affect your ability to make determinations on antidumping/countervailing duty cases, and what impact does the lack of a defined policy have on your FY 1994 budget request?

b. Will any changes to your FY 1994 budget request be necessary once an Administration trade position is settled?

ANSWER:

The Department of Commerce is committed to strong enforcement of antidumping and countervailing duty laws. The trade policy of the Department of Commerce is to expand markets for U.S. exports as well as to vigorously and fairly enforce our laws on unfair trade practices. Antidumping and countervailing duty determinations of the Import Administration are the result of a highly structured and transparent legal process in which U.S. law, regulations, decisions of the courts, and administrative precedents control the outcome. All participants have full access, frequently exercised, to U.S. courts to challenge and reverse those decisions which do not conform to law, regulations, or prior court decisions or Departmental practice. Enforcement of laws on unfair trade practices is done separately from any trade policy development undertaken by the U.S. Trade Representative.

Further, we are confident that no changes will be necessary in our FY 1994 budget.

International Trade

QUESTION:

Two weeks ago, this Subcommittee heard from the new Secretary of State, Warren Christopher. In testimony delivered at that hearing, Secretary Christopher indicated that the State Department needed to get more involved in promoting the interests of U.S. businesses overseas. Have you had any discussions with Mr. Christopher on the appropriate role of the State Department versus the Commerce Department in trade promotion activities?

a. What do you see as an appropriate mix of responsibilities between State and Commerce? Where would the Agency for International Development (AID) fit in under an ideal situation?

b. Currently, some 18 agencies throughout the Federal government are involved in some aspect of trade promotion. The Trade Promotion Coordinating Committee (TPCC) was established in 1980 to eliminate duplication in trade promotion programs. Do you feel the TPCC is carrying out its intended purpose, and would you favor moving the TPCC responsibilities in their entirety to the Commerce Department in order to provide more unified budget requests for Federal trade promotion activities?

ANSWER:

Yes, we are coordinating with the Department of State and other agencies in bring the Trade Promotion Coordinating Committee (TPCC) to full fruition. We look forward to working more extensively with State on TPCC and other activities. A cabinet-level meeting of the Trade Promotion Coordinating Committee (TPCC) was held on March 31, 1993. State, of course, participated as a TPCC member agency.

Commerce's U.S. and Foreign Commercial Service posts provide excellent support for U.S exporters in those markets which collectively account for over 93% of the market for U.S. exports. State supports exporters in those countries where there is no US&FCS presence -- a large number of countries which have relatively limited opportunities for U.S firms.

I see two main roles for State in countries where Commerce's US&FCS is present:

- Advocacy: Advocacy involves diplomatic support of US firms commercial interests -- often required many times in the context of major projects abroad. US&FCS officers are the front line for US business on advocacy issues, identifying opportunities and marshalling the resources of the Ambassador and Deputy Chief of Mission at the right time to weigh in on behalf of US interests.

- Information: Information and reporting done by other embassy sections are often of interest to the US business community. Since the US&FCS has in place a system of information dissemination (through the US&FCS district offices in the US, the National Trade Data Bank, etc.) the State Department can work more closely with the Commerce Department to develop the level of commercially valuable reporting so that it is readily available to US firms.

With respect to AID, let me first say that the Administration is currently reviewing all international assistance programs, including AID, to re-examine goals and priorities and look for appropriate structures, programs and resource allocation in the post cold war world. We will consult with Congress on this review.

I do not think it is appropriate for AID to engage in the same type of trade promotion activities as Commerce. We each have special strengths. Instead of duplicating

Commerce efforts, we hope that AID will work with us through the TPCC to develop programs that complement our activities overseas, such as:

- increased capital and infrastructure lending and tied aid credits;
- targeted market reforms;
- promotion of local private sector development.

In this way, the unique capabilities of AID and Commerce can be brought together with greatest impact.

The Export Enhancement Act of 1992 provided a statutory basis for the TPCC. It also called for the TPCC to develop a strategic Federal export promotion plan and a unified Federal export promotion budget, and to report to Congress on these items by September 30, 1993. As Chairman of the TPCC, I intend to see that all Federal agencies work together to develop the required strategic plan and budget. To that extent, the first TPCC meeting was held March 31, at which time, the foundation for our cooperative efforts was established. Included was the formation of a Deputies Group to drive the TPCC process on a daily basis. Decisions on shifting responsibilities should await results of the Deputies Group.

QUESTION:

I understand that the State Department's Foreign Service Institute (FSI), which provides training for Foreign Service officers, is restructuring their core curriculum to provide an increased focus on competitiveness. Their goal is to make Foreign Service officers more responsive to the American business community. Has the Commerce Department been actively involved in developing the FSI's competitiveness-oriented curriculum?

a. Do you feel that competitiveness is an appropriate focus for the Foreign Service Institute?

ANSWER:

While we applaud the objective of the State Department to improve their training to make their officers more responsive to the US business community, we have not yet been involved in restructuring their curriculum. We would like to work in partnership with State on this.

Competitiveness is an appropriate focus for the Foreign Service Institute. Every officer, regardless of rank or specialization, should understand that support for US international business interests furthers the national interests/security of the United States. They also need to understand how they can work with Commerce's U.S. and Foreign Commercial Service (US&FCS) to maximize embassy support of US business -- even in situations where we are not part of the Ambassador's in-country team -- such as our Partnership Program. Under this program, US&FCS officers advise and support State personnel as they develop export promotion activities in countries where US&FCS has no presence.

QUESTION:

The Agency for International Development (AID) has received funding for several trade-related programs under its appropriation over the past several years, particularly the Soviet-American Business Intern Training (SABIT) program and the American Business Centers (authorized by Freedom Support Act). Could you comment on the current relationship between Commerce and AID, and tell us what improvements could be made to that relationship?

a. What is the current status of negotiations on transfer of the FY 1993 funding provided to AID for American Business Centers in the former Soviet Union?

b. How do those negotiations impact your FY 1994 request for the International Trade Administration's efforts within the former Soviet Union?

c. To what extent have your plans for increasing U.S. business opportunities in the CIS been impacted by the ongoing conflict in Russia? Are plans currently on hold?

d. Does the Commerce Department's FY 1994 budget request include the necessary funds to continue programs which had been carried out by AID in FY 1993 and in prior years?

ANSWER:

In the past, the relationship between Commerce and AID has been complicated by the allocation of funds by the Congress and previous administration to AID for commercial programs, by funding transfers from AID for certain commercial programs, and by duplication or overlap of programs and activities where AID has expanded into essentially commercial activities. As to improving the relationship, I would like to defer until the TPCC has had a chance to consider A.I.D trade promotion activities, and we know the outcome of other reviews of foreign assistance programs.

Commerce has aggressively pursued the MOU with AID on the ABC funding. I have expressed my personal interest in coming to an agreement with Ambassador-designate Strobe Talbott.

These negotiations have had no impact on the US&FCS request for FY 1994 funds. FY 1994 funding covers US&FCS in the former Soviet Union. We believe once received the AID funds will support the necessary number of ABC's in the NIS.

ITA plans for expanding the number of US&FCS posts in the former Soviet Union have not been seriously impacted by recent developments. While plans have not been put on hold, we do plan to monitor the situation, and will reevaluate them if necessary. Plans for the other activities also are continuing.

Our FY 1994 budget request includes over $8.1 million to continue programs funded by AID in FY 1993 or in prior years. Included are the Consortia of American Businesses in the Newly Independent States (CABNIS), Business Information Services for the Newly Independent States (BISNIS) and Special American Business Internship Training (SABIT) programs.

QUESTION:

Have you reviewed the mix of trade promotion activities within Commerce's International Trade Administration, and would you support a consolidation of all DOC trade promotion activities under the U.S. and Foreign Commercial Service (US&FCS)? How would such a consolidation affect your FY 1994 budget proposal?

ANSWER:

We continually review the mix and performance of our trade promotion activities. However, we do not support a consolidation of all trade promotion activities within the US&FCS. Such a consolidation would be a step in the wrong direction. ITA is a highly integrated organization providing trade promotion services to clients from our various units. While US&FCS provides the bulk of direct business counseling, the contributions of Trade Development with its industry perspective, and IEP, with its country perspective, are equally important. We will continue to strengthen the linkages among these units.

National Oceanic and Atmospheric Adminstration

QUESTION:

One of the savings you are proposing is a reduction for "non-recurring" items under NOAA. While we have not seen which projects are on the list, I am certain that most of these projects are of critical importance to Members of Congress. Can you provide a definitive list of these projects proposed for elimination?

a. What criteria was used to determine which projects are "low-priority" under NOAA?

ANSWER:

Several criteria were applied in determining NOAA's program termination proposals. Programs that are clearly state rather than NOAA responsibilities have been proposed for termination. Programs not directly supporting NOAA's mandated mission are also proposed for termination, as they require resources that could better support core NOAA objectives. In addition, funds appropriated by Congress for completed studies or activities have been proposed for termination.

NOAA's termination list also includes funds that are passed entirely through to agencies or other entities that do not support NOAA's mission. Lastly, $27.2 million of the proposed items are for one-time construction projects that are non-NOAA sites.

A detailed list of terminations is attached.

FY 1994 PROPOSED TERMINATIONS
(dollars in thousands)

	FY 1994 DECREASE
Operations, research and facilities	
NATIONAL OCEAN SERVICE	
Mapping, Charting & Geodesy	
• Mapping and Charting	$2,500
• SC cooperative geodetic survey	554
• Land information system	1,674
Observation and Assessment	
• Observation buoys/California	140
• Observation buoys/Chesapeake Bay	400
• Institute for Marine Engineering	500
• Marine protective structures	100
• NY harbor water quality model	75
• Maui algal bloom crisis	450
Ocean and Coastal Management	
• Charleston, SC. spec area management plan	960
• Hawaii humpback marine sanctuary institute	144
Total, National Ocean Service	7,497
NATIONAL MARINE FISHERIES SERVICE	
Information Collection & Analyses	
• Oyster disease research	1,500
• Stuttgart	576
• Hawaii stock management plan	500
• Hawaiian monk seals	520
• Atlantic bluefin tuna research	300
• Center for Shark Research	140
Conservation and Management Operations	
• Columbia River smolt	112
• International Fisheries Commission	700
• Pribilof Island	300
• Beluga Whale Committee	192
• Fishery observer training	96
• East Coast observers	700
State and Industry Assistance Programs	
• Anadromous fishery project	186
• Export strategies/mahi mahi	768
Total, National Marine Fisheries Service	6,590

	FY 1994 DECREASE
OCEANIC AND ATMOSPHERIC RESEARCH	
Atmospheric Programs	
• Federal/State weather modification grants	2,639
• Southeastern storm research	372
Ocean and Great Lakes Programs	
• Southeast Florida and Caribbean Recruit	1,000
• GLERL zebra mussel	911
• Lake Champlain study	190
• Pacific island technical assistance .	190
• Sea Grant - Zebra Mussel	2,800
• National Coastal R&D Institute	1,300
• National Undersea Research Program . .	13,885
Total, Oceanic and Atmospheric Research . .	23,287
NATIONAL WEATHER SERVICE	
Operations and Research	
• Data Buoy Engineering & Test	518
• Contract Observer	190
• Samoa	240
Total, National Weather Service	948
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE	
Total, National Environmental Satellite, Data & Information Service	0
PROGRAM SUPPORT	
Marine Services	
• Marine electronics agenda	700
• New England Science Center	186
Total, Program Support	886
Total, Operations, research and facilities	**39,208**

Other Accounts

Construction

• Multispecies Aquaculture Center . . .	381
• Woods Hole Marine Biology	953
• Newport Marine Science Center	1,752
• U. of N.H. Biological Science	14,309
• Alaska fisheries	95
• Columbia river facilities	7,822
• Boston Biotechnology Innovation Center.	953
• Mystic, CT Maritime Educ & Research .	953
Total Construction	27,218

Fleet modernization, shipbuilding and conversion

Fishing vessel obligations guarantees program

• No new loan guarantees	483

Promote and Develop Fisheries Products

. No grants proposed under P&D Account*	[6,400]
Total, All Appropriations	66,909

* Funds will be used to offset the ORF account.

Competitiveness

QUESTION:

The subcommittee has recently been focusing quite a bit on the issue of competitiveness. As you may know, we fund the Competitiveness Policy Council in this subcommittee. The Competitiveness Policy Council recently issued its second annual report, which highlighted many of the problems America faces which hinder the country's ability to be competitive in the world marketplace.

One of the initial recommendations of the Competitiveness Policy Council was that the U.S. should develop a long-term competitiveness strategy, to be administered perhaps by the Department of Commerce. Do you feel that is the appropriate lead agency on competitiveness? Do you think the Department is already carrying out that function?

ANSWER:

The end-use customer of a competitiveness policy is the private sector, which the President has described as "the engine of economic growth." As the dedicated agency for working with the private sector, Commerce is in a strategic position to play a leadership role in conceptualizing and implementing a competitiveness policy for the Administration, with the recognition that a successful policy depends on building consensus and effective team work within the Administration to achieve our ends.

Many of the building blocks for implementing a competitiveness strategy are already in place in the Department of Commerce. The Department must view its various programs in technology commercialization, manufacturing extension, development of consortia and partnerships, export promotion, information infrastructure, protection of intellectual property rights, development of green technology and protection of the environment, and economic development as elements of a comprehensive strategy to enhance the competitiveness of U.S. business.

QUESTION:

In your opinion, what more can the Department be doing to enhance America's competitiveness?

ANSWER:

Our nation's economic preeminence, particularly in critical sectors like manufacturing, demands an integrated approach: One that addresses the continuum from R&D through manufacturing into the marketplace; one that appreciates that the tangible problems facing American industry today include financing, business practices, intellectual property protection, worker training and fair trade. This is the outline of Secretary Brown's new vision for the Department that incorporates technology, focuses on competitiveness, and seeks economic growth. While this outline is still being filled in, we know already that it means a more strategic and innovative use of resources, personnel and facilities within the Department of Commerce in carrying out these objectives. The passage of the National Competitiveness Act by the House and Senate will be a major step in this regard.

QUESTION:

Your predecessors, Mr. Mosbacher and Ms. Franklin, had been appointed as Administration representatives to the Competitiveness Policy Council. That position is currently vacant. Will you be appointed to fill that slot on the Council?

ANSWER:

The Department of Commerce has been participating in the Council's activities, and is thoroughly reviewing its recommendations and policy objectives. We look forward to a very close working relationship in the coming years. The President's final determination on the White House appointees is expected soon.

Questions Submitted by Congressman Carr

Manufacturing Technology

QUESTION:

As you may know, the Midwest Manufacturing Technology Center (MMTC), which is one of the seven such Department of Commerce funded centers nationwide is housed in my home state of Michigan. Over the past 2 years, the MMTC has made significant progress in improving the competitiveness of the small manufacturing firms that supply components to the office furniture and automotive industry.

During the campaign, President Clinton outlined his plan for ensuring the future competitiveness of U.S. manufacturing. What roles do you see for centers such as the Midwest Manufacturing Technology Center in the President's plan?

ANSWER:

The Manufacturing Technology Centers (MTCs) are clearly an integral part of the President's plan. MTCs such as the Midwest MTC along with states which participate in our State Technology Extension Program (STEP) provide the central core of the Department's experience in manufacturing extension. MTCs will be located where there are significant concentrations of small and medium-sized manufacturing firms. In addition, we foresee the development of a network of Manufacturing Outreach Centers (MOCs), like the MTCs but smaller -- serving areas with lower concentrations of firms. In this regard, our plans are based on the number of firms which can be served by extension centers of these target sizes. The results of our experience match the thinking of the drafters of S.4 and H.R.820 in terms of design of the nationwide system.

QUESTION:

What sort of linkages do you see between the Federal labs, that are an obvious source of advanced manufacturing technologies, and the Manufacturing Technology Centers (MTC), that are a critical deployment mechanism to small and medium-sized manufacturers?

ANSWER:

A central tenant in NIST's thinking is to make the fullest possible use of existing resources, whether in another Federal agency or in a university or other place. We do not intend to duplicate capabilities that can be made available by other means. The Federal laboratories are valuable technology sources, and we are working to link them fully with our extension activities. We have working agreements with a number of the laboratories, and in some cases they have placed personnel on-site at NIST to help integrate their activities with those of the Department.

QUESTION:

The MMTC has identified electronic communication of business and product information between large firms and their smaller suppliers as a large barrier to international competitiveness and is actively working with the automotive and office furniture industries to solve these problems. Additionally, we are told that other MTCs are working with their clients on similar problems in energy utilization, environmental compliance and quality standards. Do you intend to make additional resources available to the MTCs to address such issues?

ANSWER:

Our first priority is to use our resources to establish the national network of manufacturing outreach centers. The precise areas of focus of the centers will depend on the needs of the regions which they serve. Electronic communication of business and product information is a very important area of activity for MTCs, and NIST wholeheartedly supports the work of the MTCs to help their client base of manufacturing firms in this area.

Defense Conversion

QUESTION:

Defense conversion is a much discussed issue these days. While it is important to assist those affected by base closings, other industries, such as the automobile industry, are greatly impacted in this economy. If you are proposing programs to retrain defense workers what are your plans to retrain displaced auto workers and those in other non-defense related industries?

ANSWER:

In our activities with DOD/ARPA, DOE/DP, NSF, and NASA on the Technology Reinvestment Package of defense conversion, we have noted that technology deployment services which focus on competitiveness and quality job creation should be made available nationwide. The Department of Commerce shares with Secretary Aspin the conviction that economic strength is important to the United States in the same way that military strength is.

The Department of Labor is responsible for providing funds for retraining displaced workers; in view of this, we do not anticipate using any of the FY 1993 Economic Stimulus monies for worker retraining programs. The $45 million requested as part of the FY 1993 Economic Stimulus Program will be used to fund projects that meet EDA's Title IX eligibility criteria and can be gotten under way quickly. These additional FY 1993 funds will be used to augment the Agency's regular Title IX Economic Adjustment Program; they will not be limited to defense conversion activities.

QUESTION:

I know that you have publicly spoken on the importance of tourism. What plans, if any, do you have for a White House Conference on Tourism?

ANSWER:

Congressman Oberstar, in his capacity as Chairman of the Congressional Travel and Tourism Caucus, proposed the idea of a White House Conference on Tourism. It appears to be a good idea and we are interested in the concept. However, we are currently assessing the proposal in terms of the required resources, elements of structure and content, as well as the priorities and demands of the White House.

Trade Adjustment Assistance

QUESTION:

Please explain the justification for eliminating the funding for Trade Adjustment Assistance Centers? What other present programs in my state, for example, duplicate the efforts of this Center?

ANSWER:

The Department is proposing to eliminate the Trade Adjustment Assistance (TAA) Program because it is more cost effective to carry out this activity through existing Commerce programs which provide comparable services. The 12 TAA Centers (TAACs) are too small a network to stand alone and are located near other Commerce facilities which can assume TAAC duties.

Commerce will continue to provide assistance to all manufacturing firms and industries seeking assistance through 30 NIST Manufacturing Technology Centers (MTCs), 100 MBDA Business Development Centers (BDCs), 67 ITA district and branch offices and EDA's Technical Assistance Program. Technical assistance is also available through the Small Business Administration's Small Business Development Centers (SBDCs).
Unlike TAA, the aforementioned programs do not require a

certification process. TAA client's seeking future assistance from these programs will not require certification. Assistance will be provided upon request. For a firm to be eligible for TAA assistance the firm must submit a petition for Certification of Eligibility showing injury. EDA is statutorily required to complete processing within 60 calendar days. Within two years of certification, the firm must submit an acceptable adjustment proposal and an application for technical assistance. This can be a time consuming process.

In addition to providing domestic assistance, the Department has an extensive outreach program to assist manufacturing firms to increase export sales. In FY 1992, ITA began providing funding to assist industry-specific organizations to establish overseas offices through the Consortia of American Business Program. Funding for this program is included in ITA'S FY 1994 Budget Request. In FY 1993, ITA began the Market Development Cooperator Program which provides grants to trade associations to develop export promotion programs. ITA is requesting $2.5 million in FY 1994 to continue this program.

Among the Commerce programs located in Michigan, there are two EDA sponsored University Centers located at the University of Michigan and Michigan State University. In addition, there is a Manufacturing Technology Center in Ann Arbor and a Minority Business Development Center in Southfield, Michigan.

QUESTIONS FOR THE RECORD FROM CONGRESSMAN ROGERS

Defense Conversion

QUESTION:

The Department has requested $33 million for defense conversion, the entire increase for EDA.

How does the Administration intend to score these funds, as defense or domestic?

ANSWER:

These funds have been scored as domestic discretionary in the President's FY 1994 Budget.

QUESTION:

EDA has received $50 million in transferred funds from the Department of Defense, and I understand that another $80 million has just been transferred.

However, during consideration of the Supplemental, we learned that only 15 grants, totalling about $17.7 million have been awarded.

Why is it taking EDA so long to get these funds into the impacted communities, and given the remaining money, why does EDA need an additional $33 million in FY94?

ANSWER:

EDA has now awarded 18 grants valued at $22 million and has invited proposals totalling an additional $39.6 million. The principal delay in awards of FY 1991 and FY 1993 defense appropriations was the focus on undeveloped base reuse projects, not existing community adjustment projects.

Our experience with the 1988 and 1991 rounds of base closings has shown that completing the base reuse plans can take three to four years after the decision to close the base is made. The time required to prepare the environmental impact statement and to transfer base property to an applicant eligible to receive EDA assistance is particularly long. We are projecting, however, that communities affected by the first two rounds of base closings are now, or soon will be, in a position to begin investments on former base properties.

The defense conversion projects that move most quickly are those associated with defense contract cancellations and are not dependent on reusing or transferring military property. This is an area that the Agency and the Department has targeted for additional improvement, including exploring possible legislative changes that would result in accelerated processing.

Also, EDA anticipates making more investments directly in the affected communities, rather than just on the transferred base property. This will enable EDA to begin assisting affected communities immediately while the longer range base reuse process is gotten underway.

QUESTION:

The Defense Conversion Commission reported in January that several communities impacted by defense reductions said EDA's review process is too long--taking an average of six months to approve projects after they have been invited.

The inordinate length of the EDA process has been a problem for some time. How does the Department intend to remedy this problem?

ANSWER:

All EDA projects, including defense conversion projects, and particularly those that involve construction activities, are subject to all of the statutory compliance requirements that apply to Federal grant assistance, such as the National Environmental Policy Act which mandates specific responsibilities and reviews that must be complied with before financial assistance can be awarded. Applicants require considerable time to assemble information, and obtain state and local clearances or permits that are required before EDA can legally award a grant.

Applicants must also identify the non-Federal matching funds that will be part of the project and they must demonstrate that they hold sufficient legal interest in the property to be improved with grant funds. The latter requirement is of particular concern with base closure situations where the transfer of the property to an eligible applicant may not occur until near the very end of the closure process.

While much of the time is dependent on the applicant's ability to develop necessary information to allow the Agency to complete its mandatory reviews, EDA is working to expedite its approval process, both in the regions and in headquarters. EDA is also assisting the applicants, where possible, to develop the required application information and help applicants avoid spending time on unnecessary information.

QUESTION:

The President announced on March 12th that NIST would play a role in a coordinated technology-oriented defense conversion program. In your statement, you state that NIST is expected to receive up to $125 million from the Department of Defense in FY 1993 for manufacturing extension programs.

Are funds included under NIST in the FY 1994 request to continue this effort?

ANSWER:

No. However, funds are included in our FY 1994 request to continue the development of our Manufacturing Technology Centers, Manufacturing Outreach Centers, State Technology Extension Program, and activities to build linkages among Federal agencies, technology sources, and extension service providers.

Foreign Commercial Service

QUESTION:

I note in your budget an increase for the International Trade Administration.

The US&FCS, I feel, is our frontline troops in the battle for gaining new markets abroad particularly in the former Communist countries.

Can you give us a brief overview of what is currently being done by the Department, and what plans you have for the Commercial Service?

ANSWER:

We have requested a $10.5 million catch-up for the US&FCS in FY 1994. These funds will strengthen overseas field support for exporters that has eroded over the past few years due to unbudgeted increases in overseas costs. This increase will allow us to respond to exporters more aggressively, as Congress intends. It will also set the stage for the future. We will use a portion of the resources to fill 28 unfunded positions. As the chair of the TPCC, I am conducting a government-wide review of export promotion activities. The TPCC review will undoubtedly impact on our plans here in the Department, including the U.S. and Foreign Commercial Service, beginning in FY 1995.

I agree that US&FCS is our frontline in the battle for gaining new markets abroad. Currently, we are aggressively expanding operations in former Communist countries, with a focus on the former Soviet Union. In the recent past staff in Eastern Europe, Russia and the Newly Independent States has more than quadrupled; staff has been added to key markets in Asia, Latin American and Europe. Offices were opened in Berlin, Leipzig, Sofia, USEC/Brussels, Nagoya, Kiev and St. Petersburg, and re-opened in Kuwait, Prague and Panama City.

During the past year, US&FCS also continued to implement major improvements in its operations and programs that resulted from its Strategic Review. The most important of these is our Commercial Information Management System (CIMS), the computer system that links together our domestic and overseas offices making them even more effective in responding to the trade information needs of U.S. exporters. We expect to complete the system in 1994. Modern office automation equipment and software will be installed at the remaining 104 overseas sites, seven of which are in the NIS, in FY 1993, and at headquarters in FY 1994.

WEDNESDAY, MARCH 31, 1993.

PATENT AND TRADEMARK OFFICE

WITNESSES

MICHAEL K. KIRK, ACTING ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS

BRADFORD R. HUTHER, ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING

JAMES R. LYNCH, DIRECTOR, OFFICE OF BUDGET, PATENT AND TRADEMARK OFFICE

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET, DEPARTMENT OF COMMERCE

BOYD ALEXANDER, DEPUTY ASSISTANT COMMISSIONER FOR INFORMATION SYSTEMS

OPENING REMARKS

Mr. MOLLOHAN [presiding]. The first item we will consider this morning is the fiscal year 1994 budget request for the Patent and Trademark Office under the Department of Commerce.

The request for appropriated funds from the special Fee Surcharge Fund is $103,000,000, which is an increase of $16,328,000 over the amount appropriated for fiscal year 1993. This amount is in addition to the $415,692,000 anticipated to be collected in fiscal year 1994 in offsetting fee collections.

We have not received the detailed justifications supporting this request, but we will insert those into the record at the appropriate time.

[CLERK'S NOTE.—Subsequent to the hearing, the detailed budget justifications were submitted.]

[The information follows:]

United States
Department of Commerce

Patent and Trademark Office

1994 BUDGET
SUBMISSION TO
THE CONGRESS

April 1993

Exhibit 1

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
Budget Estimates, Fiscal Year 1994
Congressional Submission

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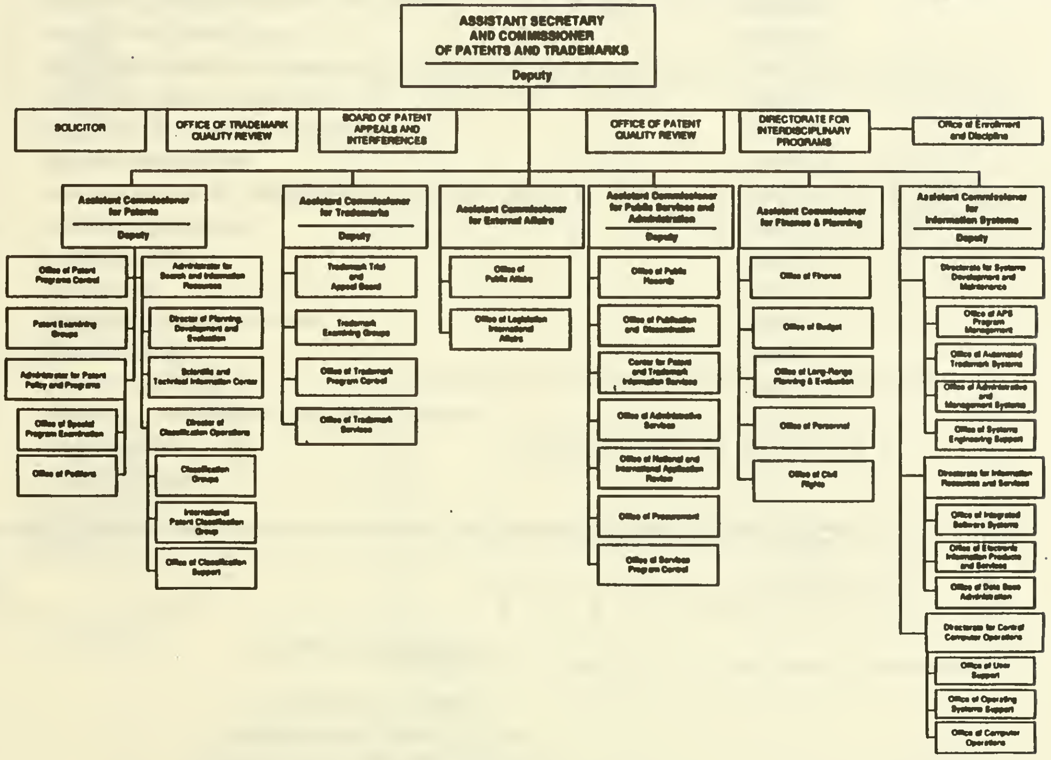
EXHIBIT 1 to DOO 30-3

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE


ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
Deputy
SOLICITOR
OFFICE OF TRADEMARK QUALITY REVIEW
BOARD OF PATENT APPEALS AND INTERFERENCES
OFFICE OF PATENT QUALITY REVIEW
DIRECTORATE FOR INTERDISCIPLINARY PROGRAMS
Office of Enrollment and Discipline
Assistant Commissioner for Patents
Deputy
Office of Patent Programs Control
Patent Examining Groups
Administrator for Patent Policy and Programs
Office of Special Program Examination
Office of Petitions
Administrator for Search and Information Resources
Director of Planning, Development and Evaluation
Scientific and Technical Information Center
Director of Classification Operations
Classification Groups
International Patent Classification Group
Office of Classification Support
Assistant Commissioner for Trademarks
Deputy
Trademark Trial and Appeal Board
Trademark Examining Groups
Office of Trademark Program Control
Office of Trademark Services
Assistant Commissioner for External Affairs
Office of Public Affairs
Office of Legislation International Affairs
Assistant Commissioner for Public Services and Administration
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Office of Public Records
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Office of National and International Application Review
Office of Procurement
Office of Services Program Control
Assistant Commissioner for Finance & Planning
Office of Finance
Office of Budget
Office of Long-Range Planning & Evaluation
Office of Personnel
Office of Civil Rights
Assistant Commissioner for Information Systems
Deputy
Directorate for Systems Development and Maintenance
Office of APS Program Management
Office of Automated Trademark Systems
Office of Administrative and Management Systems
Office of Systems Engineering Support
Directorate for Information Resources and Services
Office of Integrated Software Systems
Office of Electronic Information Products and Services
Office of Data Base Administration
Directorate for Central Computer Operations
Office of User Support
Office of Operating Systems Support
Office of Computer Operations

May 12 1992

Exhibit 3

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
Budget Estimates, Fiscal Year 1994
President's Submission

General Statement

I. Mission of the U.S. Patent and Trademark Office

The Patent and Trademark Office (PTO) administers the laws relating to patents and trademarks in order to promote industrial and technological progress in the United States and strengthen the national economy. This mission is accomplished by:

- Examining patent and trademark applications, issuing patents, and registering trademarks.
- Disseminating patent and trademark information to the public.
- Encouraging a domestic and international climate in which intellectual property can flourish.

II. Budget At A Glance

Obligation Level: The 1994 budget request proposes an increase in funds of $45,020,000 from $473,672,000 in 1993 to $518,692,000.

Source of 1994 Funds: All funds in 1994 are provided by fees from the sale of PTO products and services. A portion of the PTO fee collections for surcharges imposed on patent statutory fees are deposited into a Special Fee Surcharge Fund from which equal amounts are appropriated. In 1994, the PTO will deposit $103,000,000 to the Fee Surcharge Fund and will seek $103,000,000 in appropriations from the Fund.

Fee Rates: With the exception of an increase from $210.00 to $245.00 to the trademark application fee, the PTO will not adjust any other fees during FY 1994. This "standstill" in fees is the result of measures directed by the President that will save the PTO $14,846,000 ($5,969,000 in administrative and personnel savings and $8,877,000 by foregoing a pay raise in FY 1994), and a reduction granted by the General Services Administration on the rates paid for leased space that will save the PTO $6,759,000 in FY 1994.

The existing trademark fee structure, even if adjusted by CPI, will not generate enough income to fund the trademark-related functions of the PTO. Instead of reducing the quality of trademark examination, increasing the trademark application pendency period, or eliminating services to ensure that expenses do not exceed income, the PTO proposes to increase the trademark application fee.

Employment Levels: Staff years, or Full Time Equivalent (FTE) positions, will be reduced by 128, from 5,101 in the enacted FY 1993 budget to 4,973 in FY 1994. This change represents the PTO contribution to the President's directives to reduce overall Federal employment by 100,000 positions.

Exhibit 3

III. Goals and Objectives

A. PTO Goals and Objectives.

Maintain Pendency Times

- Achieve an average time of patent pendency to issuance/abandonment of 19.1 months in 1993 and 18.9 months in 1994. The 1992 authorization bill for the PTO limited the 1992 fee rate increase and reduced planned funds available to the patent examination processes, as well as to all areas of the Office. Adjustment of the 1992 fee rates by the 1993 changes in CPI allowed for inflationary costs.

- Reduce biotechnology patent pendency to issuance/abandonment to 22.5 months in 1993 and to 18.9 months in 1994.

- Trademark first action pendency is three months in 1993 and will remain below three months in 1994.

- Trademark pendency to registration/abandonment is 14.0 months in 1993 and will be 13.8 months in 1994. Trademark fees were set in 1992 at levels below those needed to entirely fund the Trademark operation. As a result, the office is requesting an increase in the Trademark application filing fee from $210.00 in 1993 to $245.00 in 1994. The previously cited pendency estimates are contingent upon the authorization of the application fee increase.

Enhance Quality Through Workload and Process Management

- Deploy the Classified Search and Image Retrieval (CSIR) capabilities of the Automated Patent System (APS) in Groups 120 and 230 and to the public in 1993 and, beginning in 1994, gradually deploy to all remaining patent examiners in a shared environment.

- Begin development and implementation of the Patent Application Management (PAM) system by completing a system requirements analysis, and securing a systems integration contractor. Deploy PAM for acceptance of electronic applications by 1995 and electronic publication of issued patents by 1997.

- Make additional resources available for processing international patent applications received under the Patent Cooperation Treaty (PCT), and examine, propose, and implement alternative methods to address growing PCT workloads.

- Continue to enhance biotechnology patent examination by hiring highly qualified examiners at special salary rates and providing effective search tools.

- Continue to expand classification of U.S. and international patents and provide enhanced search tools to patent examiners to enhance the quality of issued patents.

- Continue to deploy Project 4000 personal computers among the Patent Examining Corps.

Enhance Quality Through Human Resources Management

- Recruit, hire and train 228 patent examiners in 1993 and 150 patent examiners in 1994.

Exhibit 3

- Operate the Quality Skills Center (QSC) to develop a highly competent administrative and technical support staff.
- Selectively implement authorities under the Federal Employees Pay Comparability Act (FEPCA) to improve the competitiveness of the PTO in the job market.
- Implement more efficient recruitment methods, especially for highly competitive job occupations.
- Continue to offer retention and performance incentives to employees to motivate them to perform at or above established quality and production standards.
- Address social, economic, educational and cultural diversity among the PTO employees through alternative methods of training.
- Continue to pursue cooperative and productive relationships with our employees and their representatives.

Promote Effective Access to PTO Resources

- Provide APS-CSIR capability to customers in the public search facilities, beginning in FY 1993.
- Implement the automated assignment system.
- Continue to provide patent and trademark information to the public in paper, microform, and through CD-ROM and other automated media.
- Continue to work with the European and Japanese Patent Offices in creating new search tools, such as a first page data base containing English-language translations, bibliographic and drawing information of the most recent European, Japanese, and U.S. patents.
- Continue to provide support to 74 existing Patent and Trademark Depository Libraries (PTDLs) and establish new libraries.

Strengthen Intellectual Property Protection

- Evaluate the Patent Law Harmonization Treaty and recommend action to the Secretary of Commerce.
- Continue to assist the United States Trade Representative (USTR) in obtaining an acceptable agreement on Trade-Related Aspects of Intellectual Property (TRIPs).
- Continue to assist the USTR in executing its responsibilities under Special 301.
- Continue bilateral, multilateral, and international negotiations on protection of intellectual property rights abroad.
- Continue efforts to implement U.S. legislation that promotes intellectual property protection.

Exhibit 3

Promote a Favorable Work Environment

- Acquire additional space in 1994 to accommodate expanded operations, for handling enhanced automation systems and for relocation of restructured patent examining groups.
- Continue coordinating with the Administration and the Congress on the long term space needs of the Office.
- Secure, and respond to, customer feedback on PTO activities, products and services.
- Continue the programs of the Offices of Patent and Trademark Quality Review to ensure the quality of Patents and Trademarks.
- Establish a working environment which assures the efficient, successful accomplishment of the PTO's mission and goals.
- Continue the deployment of automated work tools to the patent and trademark examination processes.

Management Initiatives

- The trademark application fee is proposed to be increased by an amount which will provide sufficient revenues for the base program.
- Continue enhancements to the PTO's financial management system to be more responsive to management and customer needs for timely financial information.
- Provide informative financial reports to major customer groups.
- Enhance access to management information.
- Continue a diversified portfolio of bilateral and trilateral projects with the European and Japanese Patent Offices.

The fiscal year 1993-1997 Long Range Plan and the 1994-1998 Planning Process Report provide more detail on the specific efforts to be undertaken by the PTO in fulfilling its goals and objectives. The objectives listed above specifically relate to initiatives supported in this budget submission.

B. Policy Changes.

There are no major policy changes proposed in this budget for 1994.

Exhibit 3

IV. Summary of Proposed Budget Increases/Decreases

A. Summary Overview

Following is a comparison of the 1993 enacted budget and the 1994 President's budget request and data on current employment for the programs of the Patent and Trademark Office. The 1994 budget request is entirely supported by user fees.

	1993 Estimate			1994 Estimate			Increase/Decrease		
	Perm. Pos	FTE	Amount	Perm. Pos	FTE	Amount	Perm. Pos	FTE	Amount
Salaries and Expenses	5,291	5,035	$473,672	5,237	4,973	$518,692	-54	-62	$45,020
Less Offsetting Fee Collections			($387,000)			($415,692)			($28,692)
Appropriation Requested	5,291	5,035	$86,672	5,237	4,973	$103,000	-54	-62	$16,328
Direct			$0			$0			$0
Special Fund			$86,672			$103,000			$16,328
Offsetting Receipts			$99,000			$103,000			$4,000

Note: The appropriation from the Special Fund is derived from offsetting receipts which are deposited in the Patent and Trademark Office Fee Surcharge Fund in the U. S. Treasury as authorized by Public Law 101-508. In 1993 and 1994 user fees offset 100 percent of the costs of the PTO program.

B. Initiative Categorization

The proposed 1994 changes to the 1993 enacted budget, by budget activity, are (dollar amounts in thousands):

Activity	Description	Permanent Positions	Direct Obligations	Outlays	Page No.
1993 Enacted Budget	Request to the Congress	5,291	$473,672	$47,670	PTO-11
Adjustment To Base	Annualization of 1993 increases	0	4,945	0	PTO-16
	Restoration of 1993 reductions	0	12,328	8,980	PTO-16
	Inflationary adjustments	0	6,873	0	PTO-16
	Personnel/administrative savings	(285)	(5,969)	0	PTO-16
	Space lease savings	0	(6,759)	0	PTO-16
Patent Process	Patent Pendency and Quality	161	17,683	0	PTO-32,37
	Patent Automation - APS and PAM	0	4,926	0	PTO-33
	Patent Automation - MAS	0	3,024	0	PTO-33
	Patent Printing	0	2,618	0	PTO-40
	Subtotal	161	28,251	0	
Trademark Process	Trademark Pendency and Quality	0	1,658	0	PTO-50
	Trademark Trial and Appeal Board	0	47	0	PTO-54
	Subtotal	0	1,705	0	
Information Dissemination	Application Services	25	1,255	0	PTO-63
	Workload and Search Room Services	3	364	0	PTO-67
	Assignment Automation	0	(1,645)	0	PTO-67
	Publication Services	9	161	0	PTO-71
	Biotechnology Searchers	1	217	0	PTO-74
	Classification Services	18	736	0	PTO-74
	Search Tools	3	705	0	PTO-74
	Subtotal	59	1,793	0	
Executive Direction and Administration	Patent Attorney Roster	1	72	0	PTO-87
	Personnel and Financial Management	10	763	0	PTO-90
	EXAD Automation - MAS	0	(39)	0	PTO-94
	Space Acquisition and Management	0	1,057	0	PTO-96
	Subtotal	11	1,853	0	
	Total Changes	(54)	45,020	8,980	
	Outlays from Current Balances			45,087	
1994 Request	Total Requirements	5,237	518,692	101,737	
Offsetting Fee Collections	Less 1994 Collections		($415,692)		
	Deposit to Surcharge Fund		$103,000		
	Surcharge Fund Appropriation		$103,000		

Exhibit 3

C. Budget Increase Narratives

Patent Process

Patent Pendency and Quality: Funds are requested for patent examination to address the increase in patent applications above 1993 levels and to maintain patent pendency levels. Funds will address both patent examiner and clerical/administrative requirements. Funding levels in 1994 are determined by a zero base analysis of patent examination requirements. These requirements include hires, attritions, promotions, grade and pay structures, overtime and incentive awards, production rates by grade, and non-compensation costs incurred for a labor intensive organization.

Increases also are requested to continue restructuring of the patent examination operations to improve management control; to provide technical assistance to patent examiners; and to enhance patent examiner search tools.

Patent Printing: Higher production in the patent examination areas results in greater numbers of issued patents which must be printed.

Patent Automation: Funds are required to continue deployment of APS/CSIR capabilities among all Patent Examining Groups in a cluster environment. Under the PAM schedule, applications will be accepted in electronic form in 1995, and will be printed electronically by 1997.

Trademark Process

Trademark Pendency and Quality: The funding increase proposed for trademark examination in 1994 is for trademark pendency reduction efforts.

Information Dissemination

Application Services: Increased funds will address the growth in filings of applications and support the administrative examination of application receipts before formal examination. These funds are necessary to balance the patent and trademark application processing pipeline.

Enhanced funds also are requested to process the growth in international applications filed under the Patent Cooperation Treaty (PCT). PCT filings are growing at a faster rate than national patent filings and reflect an increase in the number of signatory authorities to the Treaty worldwide.

Funds also are requested to process increased volumes of patent maintenance fees.

Workload and Search Room Services: The PTO provides ancillary patent and trademark services to its users including certificates of corrections, recordation of assignments or titles of ownership, and operations of its public search rooms and libraries. Increased workloads in these areas will be addressed through the provision of greater resources in 1994.

Exhibit 3

Publication Services: As the numbers of patents issued and trademarks registered grow, the level of resources for the processing of these printed volumes grow. Enhancements are requested to those PTO and contractual functions that ensure the patents and trademarks are printed in a timely manner. Additional funds are also required for copy sales services.

Classification and Search Services: Foreign and national patents are classified by type of art or technology and are referenced by patent examiners in the examination search. To maintain a workable classification process, the patent classification system must be continually evaluated and reclassified to assure that the patent examiners have at their disposal the necessary patents and technical literature required for a complete search.

Search tools provided to patent examiners, such as non-patent technical literature, commercial data bases, and searchers for biotechnology patent examination, are proposed for enhancement in 1994.

Executive Direction and Administration

Patent Attorney Roster: Before a patent attorney or agent can represent a client before the Office, the patent attorney or agent must be registered with the Office. A test is administered to prospective patent agents and attorneys prior to registration. The number of registrants for the test has risen dramatically in recent years and requires greater efforts to develop and grade examinations, and to maintain the roster of registered agents and attorneys.

Personnel and Financial Management: The Office will continue efforts to focus its recruitment resources on the best qualified applicants; to develop new recruiting techniques; to develop better training programs designed to retain employees and to sharpen administrative skills; and to address growing workloads associated with a growing agency.

Financial management resources will address needed expansions of the Office's financial management system which was installed in 1992.

Space Acquisition and Management: The Office will acquire additional space in the Crystal City complex.

Exhibit 3

V. Summary of Performance and Resources

Actual and projected key workload indicators are as follows:

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
1. Patent Process:				
Regular patent applications (excluding designs)				
Applications Received	167,715	172,539	182,000	189,000
Application Disposals	155,859	162,570	165,601	167,932
Total applications in office (End of Year)	288,055	295,096	305,845	321,444
Patent Grants Printed	92,474	100,116	101,991	103,687
Total Pendency in Office (in months)	18.2	19.1	19.1	18.9 /1
2. Trademark Process:				
Applications Received (including extra classes)	120,365	125,237	130,000	138,000
First Examination Filing Disposals by Examiners	116,478	137,375	126,600	133,000
First Examination Applications in Office (End of Year)	170,236	157,342	171,642	186,842
Trademark Certificates of Registrations Printed	43,244	62,067	55,200	59,000
Pendency to First Action (in Months)	4.3	3.1	3.0	3.0
Pendency to Disposal (in Months)	16.7	15.1	14.0 /1	13.8

/1 Revisions to these performance measures were received too late to be included in the President's Budget.

Exhibit 5

DEPARTMENT OF COMMERCE
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page Number	Appropriation Currently Available for 1993:	Full-Time Permanent Positions	Budget Authority	FTE	Direct Obligations
PTO-11	Amount Available for FY 1993 as shown in 1994 President's Budget	5,291	$86,672	5,035	$487,644
	Less: Obligations Financed from 1992 Unobligated Balances	...	...	...	(13,522)
	Less: Federal Reimbursements	...	...	...	(450)
	Appropriation Enacted for 1993	5,291	86,672	5,035	473,672
PTO-16	Plus: 1994 Adjustments to Base	(285)	16,326	(196)	11,418
	1994 Base	5,006	103,000	4,837	485,090
	Plus: 1994 Program Changes	231	0	136	33,602
	1994 Estimate	5,237	103,000	4,973	516,692

Exhibit 5

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS
COMPARISON BY ACTIVITY
(Dollar amounts in thousands)

	Comparison by Activity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
PTO - 25	Patent Process:											
	Examination-Professional	Pos./BA	2,666	$192,891	2,248	$212,986	2,220	$221,108	2,359	$246,384	139	$26,278
		FTE/Obl.	2,007	189,764	2,082	221,390	2,092		2,161		69	
	Examination-Clerical	Pos./BA	783	22,937	786	30,907	648	31,103	670	31,460	22	367
		FTE/Obl.	666	22,931	722	30,813	628		644		16	
	Appeals and Interferences	Pos./BA	110	7,030	84	7,161	80	7,374	80	7,374	0	0
		FTE/Obl.	82	8,878	86	7,213	81		81		0	
	Patent Printing	Pos./BA	0	28,632	0	27,487	0	30,043	0	32,661	0	2,618
		FTE/Obl.	0	28,563	0	27,666	0		0		0	
	Patent Quality Review	Pos./BA	23	1,724	21	1,906	21	1,976	21	1,976	0	0
		FTE/Obl.	18	1,690	20	1,939	21		21		0	
	Subtotal	Pos./BA	3,682	263,214	3,118	280,446	2,968	281,603	3,130	319,864	161	28,261
		FTE/Obl.	2,663	249,926	2,908	288,011	2,822		2,907		86	
PTO - 43	Trademark Process:											
	Examination of Trademarks	Pos./BA	481	31,266	424	28,466	439	30,383	439	32,021	0	1,668
		FTE/Obl.	386	27,669	401	32,162	428		428		0	
	Trial and Appeal Board	Pos./BA	60	2,669	48	2,742	48	2,762	48	2,809	0	47
		FTE/Obl.	38	2,388	46	2,923	47		47		0	
	Trademark Printing	Pos./BA	0	1,663	0	1,606	0	1,663	0	1,663	0	0
		FTE/Obl.	0	1,663	0	1,606	0		0		0	
	Trademark Quality Review	Pos./BA	6	416	6	390	6	396	6	396	0	0
		FTE/Obl.	6	403	6	403	5		6		0	
	Subtotal	Pos./BA	637	36,804	477	33,192	492	36,174	492	38,878	0	1,706
		FTE/Obl.	429	31,903	461	37,093	480		480		0	
PTO - 57	Information Dissemination:											
	Application Services	Pos./BA	459	14,999	460	16,668	410	16,636	436	17,790	26	1,266
		FTE/Obl.	400	14,862	438	16,696	401		418		18	
	Customer Services	Pos./BA	208	12,156	219	14,327	211	14,683	214	13,302	3	(1,281)
		FTE/Obl.	206	11,896	218	14,687	211		213		2	
	Publication and Dissemination Services	Pos./BA	148	7,820	136	8,299	127	8,247	136	8,408	9	161
		FTE/Obl.	119	7,628	131	8,491	124		131		7	
	Data and Document Retrieval Systems	Pos./BA	371	30,222	366	32,103	320	33,602	342	36,160	22	1,658
		FTE/Obl.	297	30,124	353	32,201	320		336		16	
	Subtotal	Pos./BA	1,186	66,196	1,160	71,287	1,068	72,867	1,127	74,660	69	1,793
		FTE/Obl.	1,021	64,609	1,140	71,974	1,058		1,099		43	

Exhibit 5

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS
COMPARISON BY ACTIVITY
(Dollar amounts in thousands)

	Comparison by Activity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
PTO - 79	Executive Direction and Administration:											
	Commissioner	Pos./BA	11	822	10	746	9	841	9	841	0	0
		FTE/Obl.	9	806	10	762	9		9		0	
	Solicitor	Pos./BA	31	2,410	32	2,623	29	2,670	30	2,642	1	72
		FTE/Obl.	30	2,372	32	2,661	29		30		1	
	Legislation & International Affairs	Pos./BA	29	1,848	27	1,699	22	1,772	22	1,772	0	0
		FTE/Obl.	19	1,831	26	1,716	21		21		0	
	Management Planning	Pos./BA	168	9,667	163	9,976	149	10,717	159	11,480	10	763
		FTE/Obl.	136	9,363	161	10,182	149		156		7	
	Administrative Services	Pos./BA	64	3,847	67	3,676	63	3,863	63	3,863	0	0
		FTE/Obl.	78	3,833	74	3,689	70		70		0	
	Automation	Pos./BA	237	20,921	231	21,369	202	21,476	202	21,436	0	(39)
		FTE/Obl.	203	20,846	226	21,434	197		197		0	
	Space Acquisition and Management	Pos./BA	7	42,294	6	48,769	3	44,218	3	46,276	0	1,067
		FTE/Obl.	3	37,013	6	48,772	4		4		0	
	Subtotal	Pos./BA	547	81,699	536	88,748	477	85,446	488	87,299	11	1,863
		FTE/Obl.	476	76,063	536	89,116	479		487		6	
	Total Direct Obligations	Pos./BA	6,862	436,913	6,291	473,672	6,006	486,090	6,237	618,692	231	33,602
		FTE/Obl.	4,589	422,391	6,036	487,194	4,837		4,973		136	
PTO - 110	Less: Financing from Offsetting Fees	BA	-	332,890	-	367,000	-	382,090	-	416,692	-	33,602
		Obl.	-	333,960	-	387,000						
	Less: Prior Year Unobligated Balances	BA	-	12,670	-	0						
		Obl.	-	0	-	13,622						
	Less: Recoveries of Prior Year Obligations	BA	-	2,012	-	0						
		Obl.	-	0	-	0						
	Financing from Appropriated Funds	BA		88,441		86,672		103,000		103,000		0
		Obl.		88,441		86,672						
	Less: Appropriation from Special Fund for Surcharges on Fees	BA	-	86,894	-	86,672	-	103,000	-	103,000	-	0
		Obl.	-	86,894	-	86,672						
	General Fund Appropriation Requested	BA		$1,547		$0		$0		$0		$0
		Obl.		1,547		0						

Exhibit 7

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar Amounts in Thousands)

	1992 Actual Amount	1993 Currently Available Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) From 1994 Base Amount
Total Obligations	$422,391	$489,644	$485,290	$518,892	$33,602
Financing:					
Offsetting collections from:					
Federal Reimbursements	- 76	- 450	- 200	- 200	0
Trust funds	- 0	- 0	- 0	- 0	0
Non-Federal sources	- 332,814	- 387,000	- 382,090	- 415,692	33,602
Less:					
Recoveries of Prior Year Obligations	- 2,012	- 2,000	- 0	- 0	0
Restorations and Writeoffs	- 0	0			
Unobligated balance, start of year	- 12,570	- 13,522	- 0	- 0	0
Unobligated balance transferred	- 0	- 0	- 0	- 0	0
Unobligated balance, end of year	+ 13,522	+ 0	+ 0	+ 0	0
Unobligated balance lapsing	+ 0	+ 0	+ 0	+ 0	0
Total Financing from Appropriated Funds	88,441	86,672	103,000	103,000	0
Less: Appropriation from Special Fund for Surcharges on Patent Fees	- 86,894	- 86,672	- 103,000	- 103,000	0
Plus: Amount Sequestered	+ 0	0	0	0	
General Fund Appropriation Requested	1,547	0	0	0	0

Exhibit 8

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

	FTE	Amount
Adjustments:		
FTE Reduction	(77)	(5,301)
Administrative Expenses		(668)
FTE Realignment	(208)	
Restoration of 1993 Reductions		12,328
Other Changes:		
1993 Pay raise		378
Full-year cost in 1994 for positions financed for part-year in 1993	87	4,945
Within-grade step increases		2,586
Civil Service Retirement System (CSRS)		(358)
Federal Employees Retirement System (FERS)		660
Thrift Savings Plan		102
Federal Insurance Contribution Act (FICA) - OASDI		739
Health insurance		768
Employee Compensation Fund		49
Travel: Mileage		2
Rental payments to GSA		(6,759)
Rental payments to others		2
Communications, utilities and miscellaneous charges		
Other telephone (WITS)		(709)
Printing and reproduction		1,260
Other services		
Working Capital Fund		246
Other services		1,046
Supplies and materials		74
Equipment		28
Subtotal, other changes	87	5,059
Total, adjustments to base	(198)	11,418

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

			FTE	Amount
Adjustments			(285)	6,359
FTE Reduction Pursuant to the Executive Order on Reduction of 100,000 Federal Positions, there will be a reduction of 77 FTEs in 1994. This will result in a savings of $5,301,000.	(77)	(5,301)		
Administrative Expenses Pursuant to the Executive Order on Deficit Control and Productivity Improvement in the Administration of the Federal Government, there will be a savings of $668,000 in 1994 for administrative expenses.	0	(668)		
FTE Realignment The decrease of 208 FTE reflects anticipated savings of personnel through automation and through more efficient operations derived from Quality Management improvement efforts.	(208)	0		
Restoration of Base Reductions The restoration of $12,328,000 is from the 1993 Appropriation not allocated to the PTO in 1993.	0	12,328		
Pay Raises				378

Full Year of 1993 pay increase and related costs

The 1993 pay raise of 3.7% was effective January 1, 1993.

Total cost in 1994 of 1993 pay raise	9,113,000
Less amount funded in 1993	(8,735,000)
Less amount absorbed	0
Amount requested in 1994 to provide full-year cost of 1993 pay increase	378,000

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

	FTE	Amount
Full-year cost in 1994 of positions financed for part-year in 1993	87	4,945

An increase of $4,944,569 is required to fund the full-year cost in 1994 of positions financed for part-year in 1993. The computation follows:

Annual salary of new positions in 1993	434	14,218,811
Less 5 percent lapse	(22)	(710,941)
Full-year cost of personnel compensation	412	13,507,870
Less personnel compensation in 1994	(325)	(9,775,000)
Cost of personnel compensation in 1994	87	3,732,870
Benefits	0	1,211,699
Total adjustment-to-base	87	4,944,569

	FTE	Amount
Within-grade step increases		2,586

An increase of $2,586,319 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.

Estimated number of within-grade step increases	3,428
Step increases not earned due to turnover (14.7% x 3,428)	504
Average step above step 1 per separation	3
Average cost per within-grade step increase	1,159
Gross cost of scheduled step increase ($1,159 x 3,428)	3,973,052
Less savings due to separations ($1,159 x 504 x 3)	(1,752,408)
Subtotal, personnel compensation	2,220,644
Benefits	365,675
Total adjustment-to-base	2,586,319

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

		FTE	Amount
Civil Service Retirement System (CSRS)			(358)
The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 47.5% in 1993 to 45.1% in 1994 for regular employees. Contribution rates will remain the same.			
Regular:			
1994 $213,234,000 x .451 x .07	6,731,797		
1993 $213,234,000 x .475 x .07	(7,090,031)		
Total adjustment-to-base	(358,234)		
Federal Employees Retirement System (FERS)			660
The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 52.5% in 1993 to 54.9% in 1994 for regular employees. The contribution rate will remain the same.			
Regular:			
1994 $213,234,000 x .549 x .129	15,101,445		
1993 $213,234,000 x .525 x .129	(14,441,273)		
Total adjustment-to-base	660,172		

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

		FTE	Amount
Thrift Savings Plan (TSP)			102
The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2%.			
Regular:			
1994 $213,234,000 x .549 x .02	2,341,309		
1993 $213,234,000 x .525 x .02	(2,238,957)		
Total adjustment-to-base	102,352		
Federal Insurance Contribution Act (FICA)			739
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI will rise from $57,300 in 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2% in 1994.			
Regular:			
1994 $213,234,000 x .549 x .993 x .062	7,207,252		
1993 $213,234,000 x .525 x .9381 x .062	(6,511,133)		
Subtotal	696,119		
Other:			
1994 $12,591,000 x .993 x .062	775,178		
1993 $12,591,000 x .9381 x .062	(732,320)		
Subtotal	42,858		
Total adjustment-to-base	738,977		

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

	FTE	Amount
Health Insurance		768
Effective January 1992, PTO's contribution to Federal employees' health insurance premiums increased by 7.7%. Applied against the 1993 estimate of $9,972,000, the additional amount required is $767,844.		
Employees' Compensation Fund		49
The Employees' Compensation Fund bill for the year ending June 30, 1992, is $49,239 higher than the bill for the year ending June 30, 1991. The charges will be reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.		
Travel: Mileage		2
Effective October 1991, the General Services Administration Bulletin G-105 increased the mileage rate by 4.5% for those vehicles that are in the Interagency Fleet Management System. This percentage was applied to the 1993 estimate of $40,958 to arrive at an increase of $1,844.		
Rental Payments to GSA		(6,759)
Rental payments to GSA will decrease from the original estimate of $50,389,000. The change in rental payments to GSA will be a decrease of $6,759,000 bringing the new PTO estimate to $43,630,000. PTO estimate to $43,630,000.		
Rental Payments to Others		2
Rental of parking facilities in Crystal City increased from $7,620 to $9,540. This resulted in an increase of $1,920.		

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

		FTE	Amount
Communications, Utilities and Other Rental Payments			(709)
The Washington Interagency Telecommunication System (WITS) telephone conversion will be installed in the Department, converting the Centex Switch to GSA/WITS Switch. The estimated decrease of $709,376 is due to lower operating costs outside the Hoover Building.			
GPO Printing			1,260
GPO has provided an estimated rate increase of 3.7%. This percentage was applied to the 1993 estimate of $34,061,000 to arrive at an increase of $1,260,257.			
Other Services			1,292
Working Capital Fund: An additional $246,000 is required to fund cost increases in the Department Working Capital Fund to maintain the current level of operations.	246,000		
Protection Services: Effective October 1992, protection service rates increased from $13.84 to $14.81. This increase was applied to the 1993 estimate of 33,387 hours to arrive at an increase of $34,519.	34,519		
Overtime Utility Engineering Costs: Effective October 1992, overtime utility rates increased by $38,883. This increase was computed by applying the new rates to the 1993 hours estimate. The total cost in 1993 was $491,488 and the adjusted cost for 1994 will be $530,371 resulting in an increase of $38,883.	38,883		
Maintenance Agreements: Effective October 1992, maintenance agreement costs increased by $4,382. The total cost in 1993 was $61,991 and the adjusted cost for 1994 will be $66,373 resulting in an increase of $4,382.	4,382		

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

		FTE	Amount
Allowed Patent Files: Allowed patent files increased from $541,668 to $611,544 resulting in an increase of $69,876. This increase is requested for the maintenance of allowed patent files awaiting payment of the issue fee.	69,876		
Commercial On-Line Databases: On-line commercial data bases increased by $157,844. This increase consists of $124,882 for the increased cost of using data bases for the Patent Corps and $32,962 for increases in data base costs for the Scientific and Technical Information Center (STIC). These data bases are used by patent examiners for patent searches during examination.	157,844		
Law School Tuition Assistance Program: Law School Tuition Assistance Program costs increased from $975,978 to $1,069,326 resulting in an increase of $93,348. The Program is offered to Patent Corps examiners as an employment and retention incentive. This incentive allows Patent examiners to improve and learn new skills applicable to the Patent and Trademark Office mission objectives.	93,348		
Other Contracts:			
Facilities management costs increased by $48,744. The total cost in 1993 was $1,128,050 and the adjusted cost for 1994 will be $1,176,794 resulting in an increase of $48,744.	48,744		
File Maintenance Contract costs increased by $26,178. The total cost in 1993 was $984,158 and the adjusted cost for 1994 will be $1,010,336 resulting in an increase of $26,178.	26,178		
APEC VRS Contract costs increased by $1,896. The total cost in 1993 was $45,480 and the adjusted cost for 1994 will be $47,376 resulting in an increase of $1,896.	1,896		
Effective December 1991, Patent and Trademark copy rates increased by $569,575. This increase was computed by applying the new rates to the 1993 number of copies estimate. The total cost in 1993 was $1,801,621 and the adjusted cost for 1994 will be $2,371,196 resulting in an increase of $569,575.	569,575		
Total Other Services adjustments-to-base	1,291,245		

Exhibit 9

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar Amounts in Thousands)

	FTE	Amount
Supplies and Materials		74
An increase of $73,863 is requested for essential supplies and materials such as books, periodicals and subscriptions. Effective October 1993, books and periodicals increased by $51,580. This increase was derived from the 1993 total cost of $583,918 and the adjusted cost for 1994 of $635,498. Also, BNA subscriptions increased $22,283 from the 1993 total cost of $215,678 to the adjusted cost for 1994 of $237,961.		
Equipment		28
Effective October 1993, shoecase equipment used to store patents increased from $946,115 in 1993 to $974,497 for 1994. This increase resulted in an adjustment of $28,382.		
Total	(198)	11,418

Exhibit 10

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Patent Process

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination-Professional	Pos./BA	2,006	$192,891	2,248	$212,965	2,220	$221,108	2,359	$246,384	139	$25,276
	FTE/Obl.	2,007	180,764	2,082	221,390	2,092		2,161		69	
Examination-Clerical	Pos./BA	703	22,937	766	30,907	648	31,103	670	31,470	22	367
	FTE/Obl.	566	22,931	722	30,913	628		644		16	
Appeals and Interferences	Pos./BA	116	7,030	84	7,161	80	7,374	80	7,374	0	0
	FTE/Obl.	62	6,970	68	7,213	61		61		0	
Patent Printing	Pos./BA	0	28,632	0	27,487	0	30,043	0	32,661	0	2,618
	FTE/Obl.	0	28,563	0	27,556	0		0		0	
Patent Quality Review	Pos./BA	23	1,724	21	1,906	21	1,975	21	1,975	0	0
	FTE/Obl.	16	1,698	20	1,939	21		21		0	
Subtotal	Pos./BA	2,852	253,214	3,119	280,446	2,969	291,603	3,130	319,864	161	28,261
	FTE/Obl.	2,663	240,926	2,892	289,011	2,802		2,887		85	
Less: Offsetting Fee Collections	BA	-	187,598	-	224,793	-	223,226	-	251,477	-	28,261
	Obl.	-	184,311	-	233,349						
Financing from Appropriated Funds	BA		65,616		55,662		68,377		68,377		0
	Obl.		65,616		55,662						
Less: Appropriation from Special Fund for Surcharges on Fees	BA	-	65,616	-	55,662	-	68,377	-	68,377	-	0
	Obl.	-	65,616	-	55,662						
General Fund Appropriation Requested	BA		$0		$0		$0		$0		$0
	Obl.		0		0						

Exhibit 12

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Patent Process

Goals and Objectives

Priorities and Goals

- Promoting innovation and enhancing the economic, scientific, and competitive strength of the nation through the efficient administration of patent laws enacted in accordance with Article 1, Section 8, of the Constitution;
- Maintaining patent pendency at or near a goal of 18 months and improving the quality of issued patents;
- Automating patent examination search tools and processes and planning for automated application management.

Objectives

- Issue valid patents on a timely basis to secure inventors' intellectual property rights.
- Ensure the prompt publication of printed patents, which results in the rapid dissemination of new technology; encourages early investment in innovation; and accelerates technological development.
- Provide prompt and efficient service to the public, including the timely and effective adjudication of cases before the Board of Patent Appeals and Interferences.
- Continue to implement the Automated Patent System (APS), and to enhance patent application processing and classification activities.
- Continue to perform quality reviews of examined patent applications.

Base Program

Examination - Professional

Mission:

A primary mission of the Office is to issue valid patents on a timely basis. A patent confers the right to exclude others from making, using, or selling the claimed invention in the United States in exchange for disclosure of the technology described and shown in the patent specification.

Exhibit 12

History:

Article I, Section 8 of the Constitution states: "Congress shall have the power...to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

The first patent law was enacted in 1790. The present law, having its origins in 1952 legislation, is codified in title 35 of the United States Code. The term of a patent is 17 years from grant.

Prior to fiscal year 1983, pendency was high and climbing, and the Office was a paper based operation. The lack of integrity of the search files was not acceptable. Starting in fiscal year 1982, the Office initiated programs to reduce pendency, automate operations, and enhance quality. From fiscal years 1984-1989, the PTO turned around the rapidly growing backlog, reduced pendency to 18 months, APS automation was developed and implementation was begun, and doubled the size of the examining corps work force. The Omnibus Budget Reconciliation Act of 1990 made the PTO user fee dependent in fiscal year 1991. A funding shortfall in 1991, exacerbated by a delay in obtaining fee-setting legislation for FY 1992 and funding limitations which constrained hiring and overtime, caused pendency to rise in fiscal years 1992 and 1993. The PTO's goal is still to achieve 18 months pendency.

Patent Examination Process:

One of the main functions of the Office is the patent examination process. Patent laws encourage technological advancement by providing incentives to invent, invest in and disclose new technology. In the patent application examination process, the Office compares the application's subject matter to a large body of technological information to determine whether the invention is new, useful and non-obvious to someone knowledgeable in the subject matter. This is referred to as "determining the patentability of a claimed invention."

Types of patentable inventions include articles of manufacture and machines, compositions of matter, processes, plants and ornamental designs. To be patentable, an invention must be new, useful, non-obvious and adequately disclosed.

Patent examiners determine whether a patent can be allowed by searching prior art, which includes previously issued U.S. and foreign patents and non-patent literature to help determine whether the claimed invention complies with the patent statutes and court decisions. In this process, patent examiners either allow or reject an application, prepare briefs on applications appealed, make holdings of abandonment, recommend institution of interference proceedings to determine priority of ownership, and rule on certain other post-interference issues.

In the course of examining a patent application, a patent examiner makes an initial determination on the allowability of a patent, which is known as a First Action. This frequently is followed by subsequent communications with the applicant, called the prosecution of the application, until the application is disposed, i.e., either abandoned or allowed for issue as a patent.

The issuance of valid patents, on a timely basis, helps industry make important business decisions to develop new products or invest in licenses for patented technology with reasonable assurance that their patents will withstand the scrutiny of a court, potential licensees, or even a possible infringer.

Exhibit 12

From FY 1982 to FY 1992, there was a 47.8 percent increase in the number of patent applications filed. The number of applications filed is expected to increase by about four percent per year. To cope with this level of increase in filings, PTO has hired and trained more than 2,000 new patent examiners since FY 1982. Currently, filing trends indicate there is a continuing need to hire, train and retain patent examiners. The use of overtime, productivity gainsharing awards, and special pay scales aid in attracting and retaining patent examiners.

To enhance the efficiency and effectiveness of the examination process, various initiatives have been implemented to increase production during these periods of increased workloads. One of these initiatives is a restructuring of the Patent Examining Corps to improve quality of training and supervision of junior examiners. Two Patent Examining Groups were restructured on a pilot basis in fiscal year 1990. An evaluation of these two groups confirmed that the quality of Patent Cooperation Treaty applications, reissue and re-examination processing had shown substantial improvement. To date, six examining groups responsible for the examination of emerging technologies have been restructured with a seventh group in process of being restructured. Further details are included in the Executive Summary of the PTO's fiscal year 1993-1997 Long-Range Plan (LRP), and the 1994 Planning Progress Report.

In fiscal year 1992 and 1993 respectively, the Office implemented special pay rates for biotechnology and chemist examiners. The ability to attract and retain highly qualified candidates has been difficult because of the higher starting salaries paid by the private sector. Also, at the time, PTO salaries were not competitive with starting salaries of many other federal agencies within the Washington D.C. metropolitan area, such as the Defense Department and U.S. Army Walter Reed Medical Center. This seriously inhibited our hiring and retention capabilities. Further details are included in the Executive Summary of the LRP and the 1994-1998 Planning Progress Report.

Patent Automation:

Funding for the Automated Patent System (APS), included in the Patent Process line item, has supported the development and implementation of electronic search systems. Text Search subsystems have been deployed throughout the Patent Examining Corps to enhance the outdated manual search systems used since the 19th century. A pilot program was instituted using Group 220, which included deployment of the Classified Search and Image Retrieval (CSIR) system. The success of the pilot has resulted in deployment to one additional Group and part of a third group. The APS-CSIR system development will be extended to a fourth Patent Examining Group, 120, and to the public in 1993. Starting in fiscal year 1994, additional workstations will be deployed in a shared environment for use by all patent examiners in the remaining Groups. Further details are included in the Executive Summary and Information Resources chapter of the LRP and the Planning Progress Report.

Examination - Clerical

The clerical operation provides technical and administrative support to the patent examiners and is an integral part of the patent examination process. The Corps technical support staff is being enhanced through technical support academy training classes offered at the PTO and is being restructured into teams to meet the needs of the Office and the public, and to support the patent pendency goal.

Appeals and Interferences

The Board of Patent Appeals and Interferences is responsible for hearing and deciding appeals from adverse decisions of patent examiners concerning applications for patents, conducting interference proceedings, and making final determinations in the Patent and Trademark Office as to questions of priority of invention and patentability. The Board also hears and decides questions regarding property rights in inventions in the atomic energy and space fields.

Exhibit 12

The Board of Patent Appeals and Interferences traces its history back to 1861 when the first appeals board was formed in the Patent Office. Prior to 1861, the Commissioner decided all appeals within the Office from those dissatisfied with ex parte rejections of patent examiners and inter partes decisions entered in interferences. In 1927, the patent laws were amended to eliminate the existing practice of appealing a decision of the Board to the Commissioner of Patents. The Board of Appeals and the Board of Patent Interferences were merged in 1984 under section 7 of title 35, United States Code. While the Board of Patent Appeals and Interferences provides an avenue within the agency where adverse decisions of patent examiners are reviewed, the decisions of the Board continue to be subject to judicial review. Dissatisfied parties may institute civil action in U.S. District Court or appeal to the U.S. Court of Appeals for the Federal Circuit.

Patent Printing

This post-examination function provides for capturing data, and printing patents and the "Official Gazette" after patent applications have been allowed by examiners and the appropriate fees have been paid. Reexamination certificates and Statutory Invention Registrations (SIRs) are also printed. The weekly "Official Gazette" includes a section on notices, an abstract, drawings of allowed patents, if so specified by the patent examiner, and tables of data on each patent. Indexes of patents are published once a year. Copies of patents are printed and delivered in sets to libraries, trade associations, or foreign countries to promote the dissemination and exchange of patent information. Copies of the "Official Gazette" are sold by the Government Printing Office (GPO). All data that make up a printed patent are captured in electronic format and are loaded into the Automated Patent System (APS) for text searching. The patent printing function directly supports the goal of maintaining 18 months pendency while improving the quality of issued patents.

Patent Quality Review

The Office of Patent Quality Review was established in 1974 to monitor the quality of allowed patent applications. In fiscal year 1992 the Office also began monitoring the quality of actions in abandoned applications. A statistically significant four percent sample of all issued or abandoned patent applications is randomly selected by a computer for quality review by patentability reviewers.

The Office of Patent Quality Review establishes criteria and performs a review of the quality of examination of patent applications. The Office reviews the application of substantive statutory criteria for patentability; the adequacy of the examiner's search for prior art; and the adherence to examining procedures. The Office provides information to managers and patent examiners on the results of its review, makes recommendations for maintaining or improving the quality of examination, and refers disputes or disagreements between the Office of Patent Quality Review and the Patent Examining Corps relative to corrective actions in patent applications to the Commissioner for resolution.

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Examination - Professional:				
Regular Patent Applications (excludes designs):				
Applications in Office (start-of-year)	270,112	288,055	295,096	305,845
Applications received	167,715	172,539	182,000	189,000
Application disposals by examiners:				
Allowed for grant	(102,014)	(103,093)	(107,641)	(109,156)
Abandoned	(53,703)	(59,199)	(57,660)	(58,466)
Statutory invention registration (SIRs)	(142)	(278)	(300)	(310)
Total Disposals	(155,859)	(162,570)	(165,601)	(167,932)
Change in printing inventory	6,087	(2,928)	(5,650)	(5,469)
Total applications in Office (end-of-year)	288,055	295,096	305,845	321,444
First actions	158,319	165,294	166,993	179,103
Pendency: (in months)				
Pendency in Office for all applications	18.2	19.1	19.1	18.9 /1
Patent printing:				
Patent grants obligated (excludes designs)	94,791	99,767	102,094	103,673
Patent grants printed (excludes designs)	92,474	100,116	101,991	103,687

/1 Revision to this performance measure was received too late to be included in the President's Budget.

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Examination - Professional:				
Design Patents:				
Applications received	10,368	12,907	13,000	13,000
Allowed or abandoned	(14,821)	(15,856)	(16,176)	(15,838)
Design patent grants printed	9,386	9,612	10,617	10,398
Change in printing inventory	1,383	3,908	1,030	805
Total pending end-of-year	30,723	31,682	29,336	27,503
First actions	13,503	16,076	15,738	13,992
Appeals:				
Cases received	3,649	4,281	4,150	4,150
Cases disposed	4,747	4,000	4,150	4,150
Pending end-of-year	1,590	1,871	1,871	1,871
Interferences:				
Cases received	212	292	240	250
Cases disposed	235	245	240	250
Pending end-of-year	324	371	371	371
Patent Quality Review:				
Regular four percent sample	4,108	4,320	4,050	4,500
Reissue: 15 percent sample	61	58	62	62
Reissue screening: 100 percent sample	338	341	410	410
Reexamination: 15 percent sample	38	37	40	40
Abandoned reviews	0 1/	649	1,280	1,280

1/ Abandoned reviews began in FY 1992

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Examination - Professional	2,220	2,092	$221,108	2,359	2,161	$246,384	+139	+69	+$25,276

The requested examination resources in this line item can be summarized as follows:

	Personnel	FTE	Amount
Examination of Patents	+139	+69	+$17,326
Patent Automation - APS and PAM	0	0	+4,926
Patent Automation - MAS	0	0	+3,024
Total	+139	+69	+$25,276

Examination: (+139 permanent positions, +69 FTE, +$17,326,000)
One of the main projection tools used in calculating patent pendency and annual costs from a zero based budget perspective for the Patent Examining Corps is the patent production model. The patent model also calculates the number of disposals and first actions achieved for production. The calculations are based on the number of patent examiners in the Patent Examining Corps, adjusted by new hires, estimated attritions, their grade and production capacity. Also considered are overtime hours and gainsharing funding which motivates patent examiners to produce more, thereby achieving a higher production output. In FY 1992, the Patent Examining Corps experienced a lower attrition rate than in the past years. Due to this retention of examiners, usually at higher grade levels, the cost of retention has increased in FY 1992 above what was projected when the budget was formulated. Due to increased workloads, the model also projects the number of new examiner hires needed to process the increased volume in workloads from year to year. The patent model accounts for production units produced, number of patent examiners needed to meet the pendency goal and the associated costs.

Due to lower than projected attritions in FY 1993 and FY 1994, there will be fewer losses of experienced patent examiners. Because of this higher retention rate, patent pendency is presently projected to reach 19.1 months in FY 1993 and will reach 18.9 months in FY 1994.

The requested FY 1994 resources are required to address the increase in the number of patent applications filed from 182,000 in FY 1993 to 189,000 in FY 1994. This initiative assumes continuation of existing practices and procedures in the examination of utility, design, and plant patent applications. The PTO will continue to screen patent applications for national security and to issue foreign filing licenses. The PTO will also continue to reexamine issued patents, process international patent applications under the Patent Cooperation Treaty (PCT), issue statutory invention registrations (SIRs), and process requests for patent term restoration applications.

Exhibit 13

As an initiative approved in the FY 1992 Congressional submission, the PTO is continuing to restructure the organization of the Patent Examining Corps to better manage workload and resources. The restructured Patent Examining Corps, when mature, assumes 16 groups, each with 13 to 15 art units per group, with each art unit having a supervisory examiner, 10 to 15 examiners, and administrative support. After full implementation of the Patent Examining Corps restructuring plan, operating costs will be equal to or less than those which would have occurred had restructuring not taken place.

Patent Automation - Automated Patent System (APS) and Patent Application Management (PAM) System: (0 permanent positions, 0 FTE, +$4,926,000)

Automated Patent System: (0 permanent positions, 0 FTE, -$672,000)
The Automated Patent System (APS) decrease reflects the PTO's current plans for deployment of automated examiner searching capabilities. Electronic Classified Search and Image Retrieval (CSIR) has been fully deployed to two patent examining groups and part of a third group. In FY 1993, the CSIR capability will be deployed to the remainder of the third examining group, a fourth examining group, and to a facility for use by the public. In FY 1994 - FY 1995, the CSIR image data base will be expanded to include all U.S. patents issued since 1790, and shared use searching facilities will be deployed for the use of all patent examiners.

As a result of the proposed implementation plan, the PTO requests a net decrease of $672,000 in FY 1994 resulting from reductions to the APS system development effort and contractor technical support services associated with technology assessment and infrastructure activities such as quality assurance, configuration management and security program development.

Patent Application Management (PAM): (0 permanent positions, 0 FTE, +$5,598,000)
The Patent Application Management (PAM) system will enable the U.S. Patent and Trademark Office to automate the current manual system utilized to process patent applications and to enable the PTO to maintain pendency at acceptable standards. As shown in a preliminary "PAM Cost Benefit Analysis", several Patent processes, including Document receipt and conversion, Pre-Examination, Examination processing, Post-Examination, and file repository activities, will generate net overall cost savings for the Office after conversion to electronic processes. The "PAM Cost Benefit Analysis" proposes avoidance of patent processing cost with a ten-year net savings of $137 million and a twenty-year net savings of $711 million. Finally, the analysis proposes a ten-year savings of 1,900 staff years and a twenty-year savings of 8,100 staff years. This analysis is based on FY 1991 dollars with an annual four percent inflator.

The funding for the PAM system will enable the Office to select an integration contractor to begin electronic filing and photo-composition development. In FY 1995, initial deployment of electronic acceptance will be completed. In FY 1997, full deployment of the PAM system with electronic publication will be completed.

As a result of the above initiative, the U.S. Patent and Trademark Office is requesting an increase of $ 5,598,000 for deployment of the Patent Application Management system.

Patent Automation - Management and Administrative Systems: (0 permanent positions, 0 FTE, +$3,024,000)
For the Management and Administrative Systems (non APS), the PTO requests an increase of $3,024,000 for a Patent Application Location and Monitoring (PALM) and Administrative Systems support contractor, MICRO 1 network applications, and contractual services for customer support.

Benefit(s):

- Patent pendency will reach 18.9 months.
- Provide for better quality work by the patent examiners.
- Allow the U.S. Patent and Trademark Office to continue to be the world leader in the timely processing of quality patents.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Patent Process
Subactivity:	Examination-Professional
Program Change:	Patent Examination - Professional

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$8,274
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	4,255
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	12,529
12.0	Civilian Personnel Benefits	2,302
13.0	Benefits for Former Personnel	20
21.0	Travel and Transportation of Persons	16
22.0	Transportation of Things	333
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	7
23.3	Communications, Utilities, and Misc. Charges	240
24.0	Printing and Reproduction	61
25.0	Other Services	9,502
26.0	Supplies and Materials	457
31.0	Equipment	(191)
99.0	Total Obligations	$25,276

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Patent Process
Subactivity:	Examination-Professional
Program Change:	Patent Examination - Professional

Position Title:		GS-Grade	Number of Positions		Annual Salary		Total Salaries
Deputy Group Directors		SES-4	2		$107,848		$215,696
Supervisory Primary Examiners		GS-15	2		66,610		133,220
Patent Examiners		GS-15	(5)		66,610		(333,050)
Patent Examiners		GS-14	25		56,627		1,415,675
Patent Examiners		GS-13	154		47,920		7,379,680
Program Analyst		GS-13	1		47,920		47,920
Patent Examiners		GS-12	(11)		40,299		(443,289)
Patent Examiners		GS-11	(53)		35,865		(1,900,845)
Searchers		GS-11	2		33,623		67,246
Patent Examiners		GS-09	18		32,420		583,560
Patent Examiners		GS-07	4		29,530		118,120
Average Salary Adjustment							3,410,000
Total Positions and Salaries			139				10,693,833
Plus: FY 1994 Pay Raise Adjustment	0.00%		...			+	0
Subtotal - Adjusted Positions and Salaries			139				10,693,833
Less: Lapse		-	70			-	2,419,833
Total Full-Time Permanent			69				$8,274,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	69
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	69
Authorized Positions:	
Full-Time Permanent	139
Other Than Full-Time Permanent	0
Total Authorized Positions	139

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Examination - Clerical	648	628	$31,103	670	644	$31,460	+22	+16	+$357

Examination - Clerical: (+22 permanent positions, +16 FTE, +$357,000)
The Clerical Technical Support Staff for the Patent Examining Corps maintains pending dockets of national and international patent applications, acknowledges receipt and location of the application, and key enters relevant data into the Patent Application Locating and Monitoring (PALM) automated system, processes Patent Cooperation Treaty international search reports and international preliminary examination reports, types and transmits to the applicant the results of initial professional examination which "rejects" or "allows" claims in the application ("first action" notice), administratively processes the applicant's reply to the first action and to any subsequent examiner actions, and processes the examiner notice of final rejection, or allowance ("disposal"). Resources for the Clerical Technical Support Staff component are tied directly to the workload received and processed by the Patent Examining Corps. In FY 1993 and in FY 1994, the PTO is projecting application receipts of 182,000 and 189,000 respectively.

The Patent Examining Corps staff is supported by a cadre of clerical, secretarial, and administrative staff. This staff processes applications throughout the examination process and provides administrative and secretarial support to senior examiners and supervisors. Changes similar to those described in the Examination - Professional line item are proposed for the Clerical Technical Support Staff components.

Benefit(s):

- Allow for the PTO Examination-Clerical staff to continue to support the Examination-Professional staff.
- Assist the Professional Corps in support of the patent process pipeline.

Exhibit 15

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Patent Process
Subactivity:	Examination-Clerical
Program Change:	Patent Examination - Clerical

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$438
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	77
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	515
12.0	Civilian Personnel Benefits	122
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	2
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	38
24.0	Printing and Reproduction	22
25.0	Other Services	198
26.0	Supplies and Materials	3
31.0	Equipment	(543)
99.0	Total Obligations	$357

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Patent Process
Subactivity:	Examination-Clerical
Program Change:	Patent Examination - Clerical

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
Supervisory Application Examiners		GS-11	2	$33,623	$67,246
Paralegals		GS-10	9	30,603	275,427
Paralegals		GS-09	(2)	27,790	(55,580)
Deputy Director Secretary		GS-07	1	23,474	23,474
Receptionists		GS-06	9	21,805	196,245
PC Technicians		GS-04	(2)	18,579	(37,158)
File Clerks		GS-03	5	17,521	87,605
Total Positions and Salaries			22		557,259
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted Positions and Salaries			22		557,259
Less: Lapse		-	6	-	119,259
Total Full-Time Permanent			16		$438,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	16
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	16
Authorized Positions:	
Full-Time Permanent	22
Other Than Full-Time Permanent	0
Total Authorized Positions	22

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Patent Printing	0	0	$30,043	0	0	$32,661	0	0	+$2,618

Patent Printing: (0 permanent positions, 0 FTE, +$2,618,000)
This request for an increase of $2,618,000 from the base in printing and reproduction provides sufficient funds in FY 1994 to print 114,285 utility, plant, reissue and design patents.

Benefit(s):

- Allow PTO to continue to provide high-quality, timely, and professional patents to its national and international customers.
- Ensure PTO remains a respected leader in the field of providing patent services in this country and the international community as well.
- Preserve low patent pendency periods.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Patent Process
Subactivity:	Patent Printing
Program Change:	Patent Printing

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$0
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	0
12.0	Civilian Personnel Benefits	0
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	0
24.0	Printing and Reproduction	2,618
25.0	Other Services	0
26.0	Supplies and Materials	0
31.0	Equipment	0
99.0	Total Obligations	$2,618

Exhibit 10

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Trademark Process

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination of Trademarks	Pos./BA	481	$31,206	424	$28,486	438	$31,353	438	$32,021	0	$1,668
	FTE/Obl.	378	27,559	413	32,162	427		427		0	
Trial and Appeal Board	Pos./BA	50	2,669	48	2,742	48	2,762	48	2,809	0	47
	FTE/Obl.	36	2,388	48	2,923	47		47		0	
Trademark Printing	Pos./BA	0	1,513	0	1,566	0	1,663	0	1,663	0	0
	FTE/Obl.	0	1,513	0	1,506	0		0		0	
Trademark Quality Review	Pos./BA	6	416	6	398	6	396	6	396	0	0
	FTE/Obl.	6	403	0	403	6		6		0	
Subtotal	Pos./BA	537	35,804	477	33,192	492	36,174	492	36,879	0	1,706
	FTE/Obl.	420	31,863	461	37,003	480		480		0	
Less: Offsetting Fee Collections	BA	-	35,804	-	33,192	-	36,174	-	36,879	-	1,706
	Obl.	-	31,863	-	37,003						
Financing from Appropriated Funds	BA		0		0		0		0		0
	Obl.		0		0						
Less: Appropriation from Special Fund for Surcharges on Fees	BA	-	0	-	0	-	0	-	0	-	0
	Obl.	-	0	-	0						
General Fund Appropriation Requested	BA		$0		$0		$0		$0		$0
	Obl.		0		0						

Exhibit 12

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Trademark Process

Goals and Objectives

Priorities and Goals:

- Provide prompt registration of quality trademarks;
- Disseminate information to the public on pending and registered marks;
- Automate the trademark process to ensure the timely registration of quality marks, and to disseminate trademark information to the public;
- Participate in bilateral, multilateral and international negotiations addressing trademark registration and protection, including harmonization of diverse trademark laws.

Objectives:

- Maintain reduced trademark pendency of three months to first action for all cases and 13 months to disposal for all cases in initial examination, with timely disposal of all others.
- Adjudicate Trademark Trial and Appeal Board decisions within 12 weeks.
- Monitor the effects of the Trademark Law Revision Act of 1988, "intent-to-use."
- Review and evaluate the quality of examination of trademark applications.

Exhibit 12

Base Program

Examination of Trademarks

Mission:

Another primary mission of the Patent and Trademark Office (PTO) is to administer the laws relating to patents and trademarks in order to promote industrial and technological progress and strengthen the national economy. Trademark laws provide for federal registration and protection of words, symbols, or devices used by businesses to identify and distinguish goods and services offered to the public. The PTO examines trademark applications and grants federal registrations to owners of qualified marks.

History:

The first law concerning trademarks was enacted by Congress in 1870. This legislation gave the Commissioner of Patents the jurisdiction to register trademarks and the power to make appropriate rules concerning them.

In 1879, the Supreme Court declared the Trademark Law of 1870 unconstitutional on the grounds that the 1870 Trademark Law was not based on the interstate commerce provision in the Constitution. In 1881, provisions were made for the federal registration of trademarks used in commerce with foreign nations and with the Indian tribes. However, the law still made no provisions for the registration of marks used in interstate commerce, which meant that the law had little value. However, in 1905, Congress passed the Trademark Act of 1905, which authorized the registration of trademarks used in interstate commerce.

A new trademark law came into effect on July 5, 1947 (commonly known as the Lanham Act) which repealed all prior trademark laws. The new law provided for the registration of service marks and certification marks; incontestability of trademark registrations under certain conditions; and cancellation of registrations after the sixth year if an affidavit of use is not filed during the six years.

Recent legislation, known as the Trademark Law Revision Act of 1988, added an "intent-to-use" provision. Prior to "intent-to-use", the applicant had to demonstrate actual use of the mark before the Office would allow the application. Under the "intent-to-use", an applicant has the additional option to file an application based on a bona fide intention to use a mark in commerce. As a result of this change, Trademarks witnessed a 53 percent increase in filings from 1989 to 1990. To accommodate the increased workload, Trademarks increased staff, utilized innovative human resource management techniques, enhanced existing automated systems, and continued to improve the quality of registered trademarks and related services.

The Trademark function was the first of PTO's operations to be automated as a part of a PTO-wide automation program initiated in 1982. Automating the Trademark operation improved the quality and efficiency of application and registration processing. While use of T-Search has been the primary tool used by trademark examining attorneys for searching word marks since 1986 and design marks since 1988, the system is nearing the end of its life cycle. The Office is acquiring new technology to meet the challenges of the future. X-Search is one such example. X-Search, which will replace T-Search, will significantly improve the user interface to the search system by replacing obsolete workstations used by trademark examining attorneys and the public with more versatile and powerful microcomputers. Trademarks will implement X-Search in stages or modules.

PTO has taken an active role in international application issues. The Madrid Protocol is a result of the June 1989 diplomatic conference convened by the World Intellectual Property Organization (WIPO). The significance of the Protocol is the effect it may have on processing international trademark applications in the future. The Protocol would make it possible for a U.S. trademark applicant to file a single application with the U.S. Patent and Trademark Office and obtain an effective registration in multiple countries. As trademark systems around the world are automated, trademarks registered with WIPO under the Protocol likely would become part of an automated database. Such a database could then be used by Protocol members as a search tool. If the U.S. joins the Protocol, the trademark practitioner should find it easier to file in many countries

Exhibit 12

throughout the world. In addition to the Protocol, the U.S. is active in discussions on the Trademark Harmonization Treaty proposed by WIPO. If successful, the proposed Harmonization Treaty would provide uniform requirements for application forms, changes in ownership and other administrative provisions. Further details are included in the Executive Summary, Strengthening Intellectual Property chapter of the Long-Range Plan, and the 1994-1998 Planning Progress Report.

Trademark Processing:

When an application is received at the PTO, it is reviewed for formalities. If the filing requirements are met, a serial number is assigned and a filing receipt sent to the applicant. A trademark examining attorney reviews the application to determines if the mark may be registered. If the trademark examining attorney determines that the mark cannot be registered, he or she will issue a letter listing any grounds for refusal and any corrections required in the application. The applicant must respond to any objections within six months or the application will be abandoned. If the trademark examining attorney issues a final refusal, the applicant has recourse at the Trademark Trial and Appeal Board, an administrative tribunal within the PTO. If there are no objections, or the applicant resolves all objections, the examining attorney will approve the mark for publication in the "Official Gazette." The PTO will send a Notice of Publication to the applicant. Any party who objects to a registration must file an opposition with the PTO within 30 days of its publication in the "Official Gazette." If the application was based upon actual use of the mark in commerce prior to approval for publication, the PTO will register the mark and issue a registration certification. If the mark was published based upon the applicant's statement of having a bona fide intention to use the mark in commerce, the PTO will issue a Notice of Allowance. After the Notice of Allowance is issued, the applicant has six months to use the mark in commerce or request additional six-month extensions, up to a total of three years. When a statement of use is filed, it undergoes a second examination by a trademark examining attorney, and if the statement of use is approved, then the application issues as a trademark registration.

Trademark Automation:

A goal of the PTO is to automate trademark processing to improve search effectiveness and to provide a full text data base of applications and registrations for use by PTO personnel and the public. Automation of trademark operations began in 1982. The Trademark Reporting and Monitoring (TRAM) system was implemented in April 1983. TRAM was developed by PTO personnel and operates on a UNISYS A-16 computer system. TRAM monitors the application as it progresses through the trademark examination pipeline and assists in the production of the Trademark "Official Gazette," an integral part of the trademark examination process utilizing bibliographic text. The T-SEARCH system implemented in August 1986, which uses ORBIT search and T-MARK user interface software, was the primary word mark search tool used by Trademark examining attorneys. In January 1988 design searching was implemented for searching trademarks containing images. The T-SEARCH system is near the end of its useful life. The X-SEARCH system version 1.0, to be implemented in May 1993, and version 1.1, to be implemented later in 1994, are being designed to solve the limitations of the current T-SEARCH system. Further details are included in the Executive Summary and Information Resources chapter of the Long-Range Plan, and in the 1994-1998 Planning Progress Report.

Trial and Appeal Board:

Congress enacted legislation creating a Trademark Trial and Appeal Board (TTAB) in the Patent Office in August, 1958. This new law revised the appeal procedure with respect to trademarks. The TTAB decides adversary proceedings involving interference applications, oppositions to registration, concurrent use applications, and cancellation petitions. The TTAB also hears *ex partes* appeals resulting from final refusals of registration by trademark examining attorneys.

Trademark Printing:

After a trademark examining attorney forwards a case for publication, the mark is printed in the "Official Gazette" for opposition. If an opposition proceeding is filed within 30 days, the case goes to the TTAB for an *inter partes* opposition hearing. If a mark filed under the use and foreign-based provisions of the Act is not opposed, the mark is registered, a certificate of registration is printed and mailed to the applicant, copies are made for sale to the public by the Government Printing Office (GPO), a notice of registration is printed in the "Official Gazette," and a record of the registration is kept in the PTO. If a mark filed under the intent-to-use provision is not opposed, a Notice of Allowance will be issued. If a statement of use is filed and accepted, a notice of registration is printed in the "Official Gazette" and a record of the registration is maintained in the Office.

Trademark Quality Review:

The Office of Trademark Quality Review reports directly to the Commissioner. The Trademark Quality Review program was established in 1989 to evaluate and monitor trademark examination quality to assist in determining if substantive and procedural adjustments are necessary. The Office of Trademark Quality Review conducts continuous full quality reviews of at least four percent of the applications received the previous year. The applications reviewed are in various stages of prosecution, including those that have registered or abandoned. The applications are selected by computer-generated random samples.

The reviewer considers the propriety of the trademark examining attorney's action during the prosecution of the application, including the application of substantive statutory criteria for registrability; the adequacy of the search for confusingly similar marks; the adherence to approved examining procedures; and the application of judicial precedents. The office provides information to trademark managers and trademark examining attorneys on the results of its review. It also makes recommendations for maintaining or improving the quality of trademark examination. Further details are included in the Executive Summary and the Quality chapter of the Long-Range Plan, and the 1994-1998 Planning Progress Report.

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Trademark Examination:				
First Examination:				
Applications (beginning inventory)	141,951	170,236	157,342	171,642
Applications received	120,365	125,237	130,000	138,000
Use Registrations Issued	(45,639)	(59,346)	(50,200)	(53,300)
Notices of Allowance Issued	(23,602)	(42,432)	(37,900)	(40,200)
Applications Abandoned	(20,721)	(26,435)	(27,600)	(29,300)
Applications (ending inventory)	170,236 1/	157,342 1/	171,642	186,842
Change in Inventory	28,285	(12,894)	14,300	15,200
Intent to Use:				
Notices of Allowance (NOA) (Beginning Inventory)	2,267	18,729	35,829	46,229
NOA Issued	23,602	42,432	37,900	40,200
Disposals (SOU's accepted and abandonments)	(7,140)	(22,977)	(27,500)	(29,100)
NOA (Ending Inventory)	18,729	35,829 1/	46,229	57,329
Change in Inventory	16,462	17,100	10,400	11,100
Statements of Use (SOU)/Second Examination:				
SOU Applications (Beginning Inventory)	113	2,831	6,681	12,981
SOU Applications Received from ITU	5,140	14,275	19,300	20,400
ITU Registrations Issued	(2,397)	(10,345)	(12,500)	(13,700)
Abandonments	(25)	(80)	(500)	(700)
SOU Applications (Ending Inventory)	2,831	6,681	12,981	18,981
Change in Inventory	2,718	3,850	6,300	6,000
Total Trademark Inventory - EOY	191,796	199,852	230,852	263,152

/1 Inventory number is from actual TRAM count of fee-paid applications

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Trademark Examination:				
Examination Measures:				
Examiner First Actions (First Examination)	134,988	136,047	128,800	136,000
Examiner Disposals (First Examination)	116,478	137,375	126,600	133,000
Examiner First Actions (SOU/Second Exam.)	1,434	11,734	14,500	15,300
Examiner Disposals (SOU/Second Exam.)	2,422	12,372	13,000	14,400
Total Certificates of Registration	43,244 /2	62,067	55,200	59,000
Total Registrations (Classes)	49,810 /2	69,691	62,700	67,000
Total Abandonments (Classes)	22,746	35,217	36,300	38,700
Trademark Pendency: (in months)				
Pendency to first action for all cases	4.3	3.1	3.0	3.0
Pendency to registration/abandonment	16.7	15.1	14.0 /3	13.8
Trademark Trial and Appeal Board:				
Received	4,503	5,192	5,500	5,700
Disposed	(3,735)	(3,547)	(3,800)	(4,000)
Pending	6,837	8,482	10,182	11,882
Trademark Quality Review				
Cases reviewed	4,030	4,980	4,330	4,376

/2 Revised to include ITU registrations
/3 Revision to this performance measure was received too late to be included in the President's Budget.

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Examination of Trademarks	439	428	$30,363	439	428	$32,021	+0	+0	+$1,658

Background:
Prior to the Omnibus Budget Reconciliation Act of 1990 (OBRA), administrative and public service functions, such as the Trademark Search Library, personnel, budget, finance and procurement, were funded from General Fund appropriations. With the passage of OBRA, the Office became fully fee-funded, including the administrative and public service functions which were previously funded via taxpayer revenues. In the FY 1992 fee setting process for the PTO, trademark fees were not set at levels sufficient to entirely fund direct trademark processing activities and those organizations that provided support to the trademark process. The 1992 budget request to the Congress proposed total fee collections of nearly $50,000,000 for trademark fees. The Congress directed that the PTO collect $37,000,000 in trademark fees. While $6,000,000 of the $13,000,000 reduction to the trademark fee income did not adversely affect operations due to a return to a modest annual growth in workloads after the FY 1990 surge in applications, the remainder of the reduction, $7,000,000, had been requested to provide the trademark operation with additional income needed to absorb the new costs associated with funding its examination, administrative, and public service functions with trademark fee revenue. This reduction could not be recovered through CPI adjustments alone. Since the trademark budget could not present requests that exceeded anticipated fee income, the true cost of the trademark process, including its share of administrative and public service functions, was understated in prior trademark budgets. In order to avoid a severe rise in trademark pendency, the additional costs were funded with unobligated balances from prior years. However, the Office does not expect any unobligated balances to be brought forward into FY 1994 from FY 1993.

As discussed in the Offsetting Fee Collections section of this budget, the Office is requesting a trademark fee increase above the increase in the Consumer Price Index (CPI) in order to fully fund the entire trademark operation at budgeted staffing levels. Under this proposal, the requested trademark fee income level is $48,547,000, which will fund the total shortfall of $4,830,000 for both the trademark process and its share of administrative and public service functions. Of this increase, $1,658,000 million is requested for the Examination of Trademarks, $47,000 is requested for the Trademark Trial and Appeal Board, and the remainder of $3,125,000 million is requested to fund the administrative and public services functions that support the trademark operation.

Trademark Examination: (+0 Permanent Positions, +0 FTE, +$1,658,000)
The PTO is proposing an increase of $1,658,000 to fund the Examination of Trademarks at current budgeted staffing levels. This request is contingent upon approval of the Office's proposed FY 1994 trademark application filing fee, which would provide the fee income with which to fund this request. An increase of $1,384,000 is requested to provide funding for the increase of 26 FTE from FY 1993 to the FY 1994 base level. These FTE will not be funded in FY 1994 without an increase because the FY 1994 trademark base amount is not sufficient to fund all budgeted FTE. An increase of $225,000 is requested for pre- and post-examination key-entry of application information into the TRAM database system, due to increased workloads. Another $49,000 is requested to provide an additional laser printer for each of the 13 law offices, in order to expedite the printing of office actions and correspondence with applicants.

Exhibit 15

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Trademark Process
Subactivity: Examination of Trademarks
Program Change: Examination of Trademarks

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$1,001
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	1,001
12.0	Civilian Personnel Benefits	279
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	46
24.0	Printing and Reproduction	3
25.0	Other Services	278
26.0	Supplies and Materials	3
31.0	Equipment	49
99.0	Total Obligations	$1,658

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Trademark Process
Subactivity:	Examination of Trademarks
Program Change:	Examination of Trademarks

Position Title:		GS-Grade	Number of FTE		Annual Salary		Total Salaries
Attorneys		GS-12	9		$52,385		$471,465
Systems Analysts		GS-13	4		47,920		191,680
Application Examiners		GS-06	10		25,476		254,760
Program Analyst (tmsvcs)		GS-12	1		40,299		40,299
Mail Clerk		GS-04	1		16,676		16,676
Quality Control Clerk		GS-07	1		24,231		24,231
Adjustment for FTE authorized in previous budget, but not funded /1			(26)				0
Total FTE and Salaries			0				1,001,000
Plus: FY 1994 Pay Raise Adjustment	0.00%		...			+	0
Subtotal - Adjusted FTE and Salaries			0				1,001,000
Less: Lapse			0	-		-	0
Total Full-Time Permanent			0				$1,001,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	0
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	0
Authorized Positions:	
Full-Time Permanent	0
Other Than Full-Time Permanent	0
Total Authorized Positions	0

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Trademark Process
Subactivity:	Examination of Trademarks
Program Change:	Examination of Trademarks

In FY 1992, under the Omnibus Budget Reconciliation Act of 1990, the trademark operation was required to fund that portion of the Office's administrative and public service functions that supported the trademark operation and its mission. However, trademark fee income was set at $7 million less than the amount required to fully fund the trademark operation, resulting in a reduction in funding without a corresponding reduction in staffing. As a result, the FY 1994 base amount for the Trademark Process, including the Examination of Trademarks base, is not sufficient to fund trademark operations at budgeted staffing levels. In order to fully fund the trademark operation, the Office is proposing an increase in the trademark application filing fee from $210 to $245. Funding for budgeted FTE is contingent upon the increase in the application filing fee, as discussed in the Offsetting Fee Collections section. The positions and their associated 26 FTE shown on the previous page are not a request for additional positions and FTE above budgeted levels, but are shown in order to request funding for FTE in the Examination of Trademarks base that would otherwise not be funded.

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Trademark Trial and Appeal Board	48	47	$2,762	48	47	$2,809	+0	+0	+$47

Trademark Trial and Appeal Board: (+0 Permanent Positions, +0 FTE, +$47,000)
The PTO is proposing an increase of $47,000 for the Trademark Trial and Appeal Board in 1994. As mentioned above in the Examination of Trademarks line item increase, when the Omnibus Budget Reconciliation Act of 1990 was enacted, the Office became fully fee-funded, including the administrative and public service functions which were previously funded via taxpayer revenues. Trademark fees were not set at levels sufficient to fully fund both direct trademark processing activities, including the Trademark Trial and Appeal Board, and administrative and public service functions that provided support to the trademark process. As a result, the base amount for the Trademark Trial and Appeal Board does not fully fund all budgeted FTE.

The increase of $47,000 will fund an increase of two FTE from FY 1993 to FY 1994. These are not additional FTE above budgeted 1994 FTE levels, but are due to insufficient base funds. The Trademark Trial and Appeal Board affects pendency since it hears cases where applicants appeal the decision of an examining attorney to disallow an application, and where an opposition is filed by a third party against an application allowed by an examining attorney. These cases pending before the Trademark Trial and Appeal Board are included in the trademark pendency measures. Funding for these two FTE will provide the resources necessary to fully fund a necessary part of the trademark process at budgeted staffing levels.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Trademark Process
Subactivity: Trademark Trial and Appeal Board
Program Change: Trademark Trial and Appeal Board

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$37
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	37
12.0	Civilian Personnel Benefits	10
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	0
24.0	Printing and Reproduction	0
25.0	Other Services	0
26.0	Supplies and Materials	0
31.0	Equipment	0
99.0	Total Obligations	$47

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Trademark Process
Subactivity:	Trademark Trial and Appeal Board
Program Change:	Trademark Trial and Appeal Board

Position Title:		GS-Grade	Number of FTE	Annual Salary	Total Salaries
Application Clerk		GS-06	1	20,422	20,422
Office Automation Clerk		GS-04	1	16,578	16,578
Adjustment for positions authorized in previous budget, but not funded		GS-05	(2)	16,500	0
Total FTE and Salaries			0		37,000
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted FTE and Salaries			0		37,000
Less: Lapse			- 0	-	0
Total Full-Time Permanent			0		$37,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	0
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	0
Authorized Positions:	
Full-Time Permanent	0
Other Than Full-Time Permanent	0
Total Authorized Positions	0

Exhibit 10

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Information Dissemination

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Application Services	Pos./BA	459	$14,983	450	$15,558	410	$15,635	435	$16,880	25	$1,245
	FTE/Obl.	400	14,962	438	15,595	401		418		16	
Customer Services	Pos./BA	208	12,165	218	14,327	211	14,583	214	13,302	3	(1,281)
	FTE/Obl.	206	11,889	216	14,687	211		213		2	
Publication and Dissemination Services	Pos./BA	148	7,826	136	9,299	127	9,247	136	9,408	9	161
	FTE/Obl.	118	7,628	131	9,491	124		131		7	
Data and Document Retrieval Systems	Pos./BA	371	30,222	365	32,103	320	33,502	342	35,168	22	1,668
	FTE/Obl.	287	30,124	363	32,201	320		336		16	
Subtotal	Pos./BA	1,186	65,196	1,169	71,287	1,068	72,967	1,127	74,760	59	1,793
	FTE/Obl.	1,021	64,603	1,148	71,974	1,056		1,099		43	
Less: Offsetting Fee Collections	BA	-	50,841	-	57,418	-	56,906	-	58,699	-	1,793
	Obl.	-	50,164	-	58,115						
Financing from Appropriated Funds	BA		14,356		13,869		16,061		16,061		0
	Obl.		14,356		13,859						
Less: Appropriation from Special Fund for Surcharges on Fees	BA	-	14,356	-	13,869	-	16,061	-	16,061	-	0
	Obl.	-	14,356	-	13,859						
General Fund Appropriation Requested	BA		$0		$0		$0		$0		$0
	Obl.		0		0						

Exhibit 12

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Information Dissemination

Goals and Objectives

Priorities and Goals:

- Providing for the administrative examination of national and international patent applications in an expeditious manner to ensure issuance of valid patents;
- Promoting patent quality through the classification of domestic and foreign patent search files required for examination, and the provision of manual and automated search tools, particularly in the biotechnology area;
- Preparing allowed patents for issue and trademarks for registration while maintaining low pendency times;
- Dissemination of patent and trademark information to the public through publication of the "Official Gazette," sale of patent and trademark copies, maintenance of public search facilities at the PTO, support for Patent and Trademark Depository Libraries nationwide, and provision of information products in electronic form.

Objectives:

- Enhance dissemination of patent and trademark information to the user community through the use of automated systems.
- Provide timely and high quality pre-examination of patent and trademark applications.
- Efficiently process allowed patent applications.
- Maintain patent and trademark search facilities, instruct the public in their use, and fill requests for copies of official documents.
- Maintain a current and accessible patent subject matter classification system for use in locating prior art; ensure the integrity of related search files and data records; and facilitate retrieval of technical information through automated patent search systems.
- Disseminate patent and trademark information through the Patent and Trademark Depository Library network and technology assessment and forecast programs.
- Maintain collections of manual and automated technical information resources for use by examiners and the public, maintain a foreign patent collection, and provide translations of foreign language patent-related documents.

Exhibit 12

Base Program

Application Services

Pre-examination processing of patent and trademark applications involves the administrative handling of applications from receipt in the PTO until delivery to a Patent Examining Group for examination or to the Office of Trademark Services. Pre-examination includes the initial review of patent and trademark applications and drawings for compliance with requirements of form and content; determination of the adequacy and acceptability of statutory administrative fees; preliminary processing of all fee and non-fee related documents and orders; assignment of an official filing date and application number to applications; and inputting of patent bibliographic data into the Patent Application Locator Monitoring (PALM) system.

Funds also are provided for pre- and post-examination of applications received under the Patent Cooperation Treaty (PCT). Patent applications received under the terms of the PCT are administratively examined and, after formal search and, when requested, preliminary examination, are forwarded to the World Intellectual Property Organization (WIPO) in Geneva, Switzerland.

Customer Services

The Customer Services activity includes document fulfillment services, assignment functions, patent maintenance services, and the management of three public search facilities that provide information on patents, trademarks and assignments.

The Patent Search Room contains a cross-referenced set of U.S. patents issued since 1790. This file is growing by half a million documents a year, and is used by about 500 people daily. Paper and automated search files are available to the public.

The Trademark Search Library is a public search facility for trademarks. This search file includes current registrations, as well as applications for registration. Approximately 100 visitors use the facility daily. Paper and automated search files are available to the public.

The third public search facility comprises the Trademark Assignment Search Room and the Patent Assignment Search Room. In the assignment search rooms members of the public can access information showing the chain of ownership for pending or registered trademarks and for issued patents.

In addition, Patent and Trademark Depository Libraries (PTDLs) located around the country maintain collections of U.S. patents and trademarks and assist the public in using these collections. They disseminate to their users more than one million patent copies annually. Patent and trademark information is provided to the PTDLs in paper, microfilm or on CD-ROM.

Further details are included in the Information Dissemination chapter of the Long-Range Plan.

Publication and Dissemination Services

Publication and Dissemination Services include post-examination functions that occur after patent examiners allow applications, and involve functions associated with the preparation for issue of U.S. patents. Certificates of correction are issued to correct patents when requested by the patentee. In addition, two weekly editions of the "Official Gazette" (one for patents and one for trademarks) are published to disseminate information to the public.

Exhibit 12

Publication and Dissemination Services also include the patent and trademark copy sales function. The PTO sells copies of patents and trademarks to members of the public, businesses and other Government agencies for a fee. Patent copies are now generated from the Automated Patent System (APS).

Data and Document Retrieval Systems

Patent Classification and Search System Services:

The programs under this activity include functions required to maintain and update a subject matter classification system for U.S. and foreign patents and related technical literature that is vital to the patent examination process. The patent examiner search files, containing more than 17.0 million U.S. patents, 14.5 million foreign patent documents, and about 1.5 million technical literature documents, are continually growing. A concentrated effort is being made to reclassify the files by expanding the number of classifications for new technologies by subdividing the expanding search files of patents and technical literature into technologically up-to-date and smaller, more efficiently searched, classification groups. This is necessary to cope with the increasing complexity of the technology and the growing size of the search file. The classification operation includes the following activities: classification of original references (ORs), reclassification of selected segments of the search files, classification dispute management, classification of new foreign documents, clerical/contract reclassification support for both U.S. and foreign patent documents, search file quality improvement, computer support of classification operations including maintaining the master classification files, and editing, preparation and publishing of search support manuals, definitions and indexes.

The PTO participates in international activities, including the Permanent Committee on Industrial Property Information of the World Intellectual Property Organization (WIPO), bilateral exchanges under USC 12, trilateral matters involving the European Patent Office, the Japanese Patent Office, and maintenance of the International Patent Classification (IPC) system.

The Scientific and Technical Informational Center (STIC) provides services to the Patent Examining Corps and the public. STIC functions include cataloging, fulfilling technical literature document orders, managing commercial database services, on-line searching of commercial and in-house biotechnology databases, handling biotechnology computer operations, translation services, receiving and managing foreign documents, and providing foreign patent copy and reference services.

In response to the challenges created by increased activity in biotechnology patent applications, a new Patent Examining Group, 180, was formed. Group 180 is a consolidation of most of the arts that comprise biotechnology. A Biotechnology Action Plan was developed to provide high quality examination of biotechnology patent applications and reduce pendency. To provide support for the quality examination of biotechnology patent applications, the Office has implemented several initiatives, including a searcher program, enhancements to the DNA computer system which processes complex biotechnology sequence applications, and completion of the U.S. portion of the sequence back-file capture. Further details are included in the Executive Summary of the Long-Range Plan (LRP), and the 1994-1998 Planning Progress Report.

Documentation Automation:

The PTO is committed to making relevant information available to users in electronic form through the use of automated systems. Automated information dissemination ultimately will allow the users to access Full Text Search, Classified Search and Image Retrieval and patent image files throughout the U.S. These electronic information sources include the PTO's internal information resources and those of other Patent Offices. CD-ROM technology products provide the PTO with another channel to disseminate information to the user. CD-ROM products are an alternative to on-line public access to PTO data. The Office of Information Systems designs and distributes information in electronic form. For example, in 1992 APS text search was deployed on a test basis among 14 selected PTDLs. Evaluation of the testbed will continue in FY 1994. Further details are included in the Long-Range Plan (Information Resources and Information Dissemination chapters), and the 1994-1998 Planning Progress Report.

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Information Dissemination:				
Application Services:				
Mail documents processed	5,853,989	4,906,301	5,000,000	5,000,000
Files processed	580,831	581,715	660,100	690,400
Applications microfilmed	175,307	177,442	195,000	202,000
Deposit account transactions processed	507,587	550,152	594,164	641,697
Cash receipt transactions processed	917,287	959,297	1,007,262	1,057,623
PCT applns. received in Receiving Office	9,158	10,929	12,200	13,500
PCT appln. requirements rec'd/Designated Office	6,247	6,835	7,200	8,000
PCT applications received Chapter II IPEA	4,360	5,084	6,100	6,500
Customer Services:				
Certified copies (applications as filed)				
regular service	83,400	72,824	80,000	82,500
expedited service	11,468	24,817	23,000	25,000
Other cert. and uncertified Pat and TM documents	21,900	23,217	20,000	23,000
New patents filed	380,447 1/	406,711 1/	400,800 1/	446,000 1/
Reclassified patents filed	113,134 1/	520,793 1/	410,000 1/	410,000 1/
New trademark registrations filed	130,508 1/	176,256 1/	213,000 1/	226,000 1/
New trademark drawings filed	281,324 1/	282,643 1/	282,000 1/	293,000 1/
Updating trademark bound volumes	53,961 1/	53,684 1/	73,000 1/	77,000 1/
Assignment properties processed	248,442	237,132	260,000	267,000
Assignment title reports/Abstracts of title	38,741	41,867	41,600	43,300
Patent maintenance fees processed	123,703	136,316	152,600	166,500
Post-issuance documents recorded	21,900 2/	57,900	20,000	21,000
Patent and Trademark Depository Libraries	72	74	77	82

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Information Dissemination:				
Publications and Dissemination Services:				
Certificates of correction processed	15,604	21,169	20,400	18,000
Patent and trademark copies	2,166,961	1,645,216	1,850,000 1/	1,868,500 1/
Data and Document Retrieval Systems:				
Orig. references professionally reclassified	103,722	118,339	123,500	129,000
Original references clerically processed	58,181 1/	121,184 1/	118,800 1/	125,300 1/
New foreign patents processed into the files	337,470	442,001	430,000	434,500

1/ To be partially or completely accomplished by contractor personnel
2/ New performance measure

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Application Services	410	401	$16,535	435	419	$17,790	+25	+18	+$1,255

The requested application services increases in this line item can be summarized as follows:

	Personnel	FTE	Amount
Mail Processing	+5	+4	+$132
Refund Processing	0	0	+15
National Processing	+8	+5	+319
PCT Processing	+12	+9	+789
Total.................	+25	+18	+$1,255

Pre-Examination: (+25 permanent positions, +18 FTE, +$1,255,000)
This initiative for application pre-examination services addresses the FY 1994 costs of processing an application through the Mail Room and through the fee processing activities, and of microfilming and administrative review prior to formal examination. This initiative also addresses the management of programs required under Chapters I and II of the Patent Cooperation Treaty (PCT).

A patent or trademark application is received in the Correspondence and Mail Division where the application undergoes an initial administrative review, receives an official filing date, has fees coded, and is serialized in either the PALM or TRAM systems. This initial step is an integral part of the patent and trademark pipeline process and contributes to patent and trademark pendency. In FY 1994, this function will be increased by 5 positions, 4 FTE , and $132,000, as FY 1994 funding supports the processing of 323,400 applications (189,000 utility, plant and reissue patent applications; 13,000 design patent applications; and 121,400 trademark cases) as opposed to the FY 1993 estimate of 309,400 applications (182,000 utility, plant, and reissue patent applications; 13,000 design patent applications; and 114,400 trademark cases). With these additions, FY 1994 resources will be aligned with the revised application workloads.

An increase of $15,000 is requested to improve the fee refund process in the Fee Accounting Division. The current refund process requires improvement in terms of automated equipment and receipts processing procedures. Enhanced resources in FY 1994 will be used to improve responsiveness to user needs and federal requirements for financial management systems.

Exhibit 13

An increase is also requested for the administrative examination of national patent applications due to the increase in patent workloads described above. The National Application Processing Division examines patent applications for compliance with laws and regulations and correctness of fee payments; assigns filing dates; determines the specific technical areas for review of patentability; grants domestic applicants licenses to file abroad; and converts applications and related information for automated retrieval. This office also microfilms applications for future reference. In FY 1994, an increase of 8 positions, 5 FTE and $319,000 is requested for these functions.

An increase of 12 positions, 9 FTE, and $789,000 is requested for the International Application Review Division to process increased volumes of PCT applications. The International Division is responsible for all activities involved in the review, clearance, and approval of international patent applications before technical examination by the Patent Examining Corps. The Division corresponds with domestic and foreign applicants on completing the administrative requirements for processing applications under the PCT and U.S. statutes. The Division ensures that the legal rights of applicants are protected and establishes policies and procedures regarding the administrative handling of domestic and foreign applications under the PCT. The requested increase is necessary for the PTO to meet mandatory requirements under Chapters I and II of the PCT. A failure on the part of the PTO to promptly address incoming applications within the fixed timetable established by the PCT could mean that an applicant loses his/her ability to receive a filing date in a foreign nation which is also a PCT member.

Benefit(s):

- Maintain a low patent pendency rate by insuring that the pre-examination processing pipeline of 30 days is maintained.
- Maintain low trademark pendency rates for first action notices for and registration (for use cases) by the expeditious review of trademark applications in the Correspondence and Mail Division.
- Fulfill all requirements under the Patent Cooperation Treaty.

Exhibit 15

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Information Dissemination
Subactivity:	Application Services
Program Change:	Higher Application Filings

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$358
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	341
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	699
12.0	Civilian Personnel Benefits	100
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	15
22.0	Transportation of Things	2
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	43
24.0	Printing and Reproduction	81
25.0	Other Services	15
26.0	Supplies and Materials	156
31.0	Equipment	144
99.0	Total Obligations	$1,255

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Information Dissemination
Subactivity: Application Services
Program Change: Higher Application Filings

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
PCT Paralegal		GS-09	1	$27,790	$27,790
PCT Contact Representatives		GS-06	7	20,442	143,094
Application Examiners		GS-05	3	18,340	55,020
Application Clerks		GS-05	4	18,340	73,360
Initial Review Clerks		GS-04	5	16,393	81,965
Microform Operator		GS-04	1	16,393	16,393
File Clerk		GS-04	1	16,393	16,393
File Clerk		GS-03	1	14,603	14,603
File Clerks		GS-02	2	13,382	26,764
Total Positions and Salaries			25		455,382
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted Positions and Salaries			25		455,382
Less: Lapse			- 7	-	97,382
Total Full-Time Permanent			18		$358,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	18
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	18
Authorized Positions:	
Full-Time Permanent	25
Other Than Full-Time Permanent	0
Total Authorized Positions	25

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Customer Services	211	211	$14,583	214	213	$13,302	+3	+2	-$1,281

The requested customer services changes in this line item can be summarized as follows:

	Personnel	FTE	Amount
Search Room Services	0	0	+$195
Services Workload	+3	+2	+169
Assignment Automation	0	0	-$1,645
Total.................	+3	+2	-$1,281

Customer Services: (+3 permanent positions, +2 FTE, -$1,281,000)

Search Room Services: (0 permanent positions, 0 FTE, +$195,000)
An increase of $195,000 is requested for the Patent and Trademark Public Search Rooms, to align resources with the increase in file maintenance workload, and to allow for additional public copying equipment. This initiative will enable the Patent and Trademark Search Rooms to ensure that the files of paper patents and trademarks are kept up to date; that new patents are expeditiously filed; and that files used by the public are returned and filed in the proper location. The Search Room can then meet the goals of timely responses to requests from the public for information on PTO products, services, and problem resolutions. The integrity of files in the Patent and Trademark Search Rooms will be maintained.

Services Workload: (+3 permanent positions, +2 FTE, +$169,000)
An increase of 3 permanent positions, 2 FTE and $169,000 within the Certification Branch will address the anticipated workload increase from the public for certified copies of patent application files, office records, trademark files and registrations in FY 1994. The request will ensure that the Certification Branch does not develop delays in fulfilling customer requests.

Assignment Automation: (0 permanent positions, 0 FTE, - $1,645,000)
An increase of $266,000 was approved in FY 1992 to commence Phase I of automating the present assignment processing system. Automation of the current processing system is essential to facilitate the resolution of current system problems. An increase of $1,379,000 was required in FY 1993 to proceed with the timely completion of Phase II which will be the final phase of the project. A reduction is requested in FY 1994 due to a termination of contract services.

Exhibit 13

The assignment recordation and search system is important to the business community because it is key to ownership of intellectual property and orderly transfer of rights to corporate assets. The assignment system must be timely and of high quality to support these requirements.

Benefit(s):

- Enable PTO to provide efficient, timely and quality service to the public.
- Increase and maintain substantial U.S. industrial growth, and ensure U.S. ability to compete in international markets.
- Enable PTO to successfully meet the demands of a constantly changing technological society and to meet the demands of customers in this new technological environment.

Exhibit 15

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Information Dissemination
Subactivity: Customer Services
Program Change: Assignment Automation / Search Room Services

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$44
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	1
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	45
12.0	Civilian Personnel Benefits	12
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	5
24.0	Printing and Reproduction	1
25.0	Other Services	(1,363)
26.0	Supplies and Materials	7
31.0	Equipment	12
99.0	Total Obligations	($1,281)

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Information Dissemination
Subactivity:	Customer Services
Program Change:	Assignment Automation / Search Room Services

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
Conveyance Examiners		GS-07	1	$22,717	$22,717
Application Clerks		GS-04	2	16,393	32,786
Total Positions and Salaries			3		55,503
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted Positions and Salaries			3		55,503
Less: Lapse			- 1	-	11,503
Total Full-Time Permanent			2		$44,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	2
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	2
Authorized Positions:	
Full-Time Permanent	3
Other Than Full-Time Permanent	0
Total Authorized Positions	3

Exhibit 13

Department of Commerce
Patent and Trademark Office
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Publication and Dissemination Services	127	124	$8,247	136	131	$8,408	+9	+7	+$161

Patent Post-Examination: (+9 permanent positions, +7 FTE, +$161,000)
The PTO requests an increase of 9 positions, 7 FTE and $138,000 to address an increase of 9 percent in publications and 12.5 percent in certificates of correction. Resources requested under this initiative ensure that fee-paid patent grants are expeditiously processed for printing and publication in the Official Gazette. (Funds for printing are included in the Patent Printing line item).

There are no significant changes anticipated in the total workload for Patent and Trademark Copy Sales. However, there are significant changes in the types of orders requested by the public. These changes require PTO to provide higher-priced services. Services such as Electronic Ordering Service (EOS) orders, special coupon orders, and EOS special orders provide faster and more convenient responses to the public at a flat rate. Whereas the overall workload has stabilized, increases are projected in the volume of improved services provided to the public. Therefore, PTO requests an increase of $23,000 for FY 1994.

The partial automation of the copy sales function beginning in FY 1992 yielded $200,000 in FY 1992 savings, which were incorporated into the FY 1992 Congressional budget. Additional savings of $425,000 were realized in FY 1993 in the following line items: patent printing ($75,000) and space acquisition and management ($350,000).

Benefit(s):

- Enhance quality of service to customers.
- Enhance quality goals of PTO.
- Ensure the integrity and standards of approved patents and trademarks are maintained.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Information Dissemination
Subactivity: Publication and Dissemination Services
Program Change: Higher Publication Services

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$128
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	(123)
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	5
12.0	Civilian Personnel Benefits	36
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	16
24.0	Printing and Reproduction	4
25.0	Other Services	94
26.0	Supplies and Materials	6
31.0	Equipment	0
99.0	Total Obligations	$161

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Information Dissemination
Subactivity:	Publication and Dissemination Services
Program Change:	Higher Publication Services

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
Patent Clerks		GS-06	2	$20,442	$40,884
Patent Clerks		GS-05	4	18,340	73,360
Patent Clerks		GS-04	3	16,393	49,179
Total Positions and Salaries			9		163,423
Plus: FY 1994 Pay Raise Adjustment	0.00%		...		+ 0
Subtotal - Adjusted Positions and Salaries			9		163,423
Less: Lapse			- 2		- 35,423
Total Full-Time Permanent			7		$128,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	7
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	7
Authorized Positions:	
Full-Time Permanent	9
Other Than Full-Time Permanent	0
Total Authorized Positions	9

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Data and Document Retrieval Systems	320	320	$33,502	342	336	$35,160	+22	+16	+$1,658

The requested resources in this line item can be summarized as follows:

	Personnel	FTE	Amount
Biotechnology Searchers/Information	+1	+1	+$217
Classification Services	+18	+13	+736
Search Tools	+3	+2	+705
Total..	+22	+16	+$1,658

Data and Document Retrieval Systems: (+22 permanent position, +16 FTE, +$1,658,000)

Biotechnology Searchers/Information: (+1 permanent position, +1 FTE, +$217,000)
The Biotechnology application pendency rate is presently at 24.5 months. By the end of FY 1994, pendency is projected to be at 18.9 months with new filings of 14,138. Due to the unique needs of this emerging scientific field, there is considerable pressure on PTO from Congress and the public to improve the processing rate of applications. To reduce the pendency rate from its current level, the PTO must address the complexity, growth and special requirements of the field; unique search requirements (DNA sequence searches); and limited availability of effective search tools.

The FY 1994 initiative proposes to hire and effectively utilize additional staff by providing more highly sophisticated automated search tools, and expanding the biotechnology search operation to assist patent examiners in coping with the explosive growth in this technology. This initiative will support the continuation of an effort that began in FY 1992.

The PTO will extend the present commercial data base search services to support the biotechnology searchers who help the patent examiners expedite searches. The PTO also will utilize commercial services to provide quick turnaround response time for documents required by the patent examiners resulting from the search process. The PTO has established a separate Scientific and Technical Information Center (STIC) branch library devoted solely to biotechnology and chemical art units.

Exhibit 13

Classification Services: (+18 permanent positions, +13 FTE, +$736,000)
Because technology continually changes, PTO search files continue to change and expand. In light of this rapid expansion and change, it is essential that PTO continually modify and modernize its system of classification to ensure the issuance of valid patents and to provide the American public with easy access to the important information contained in patents. A key ingredient in this process is the Search and Information Resources Administration's reclassification program. This program maintains our patent classification system so that it reflects changes in technology, which is essential to effective examination. It is imperative that the professional and support staffs who are engaged in the reclassification effort be given the automated tools and other resources they need to insure that examiners can promptly and accurately examine applications. It also is essential that applications be routed to the patent examiner most able to provide the best possible examination of that application.

For FY 1994, the PTO has set as its goal the reclassification of 129,000 Original References (ORs) by professional classifiers and the processing of 125,300 reclassified ORs by clerical and contractor staff. PTO's reclassification effort is directed at the most active 25 percent of the OR files on a ten-year cycle. This accounts for over half of all cited, and searched classifications. Fifty percent of all issuing documents are placed in these classifications. Increased funds are requested in FY 1994 to process an additional 5,500 professional ORs and 6,500 clerical ORs. The search files must be restructured through the reclassification process to support comprehensive, quality searches by the patent examiners. Increases in resources needed in FY 1994 to meet reclassification goals have been reduced due to fewer foreign patents being received from other countries. The U.S. is obligated by treaty to make foreign patents available to its examiners. Reductions in foreign patents received decreases the classifiers required to process foreign patents in the US classification system, thus freeing classifier resources for reclassification work.

Corresponding initiatives are also proposed to address increased workloads for processing new U.S. patents into the search files and to resolve disputes over which patent examining group is to examine certain applications. Growth in both the number of patents issued and the number of applications filed has resulted in a concurrent growth in the above work areas. Expeditious processing of new patents into the search files is essential to timely and high quality patent examinations. Resolution of application classification disputes must be timely as misdirected routing of applications delays examination.

Search Tools: (+3 permanent positions, +2 FTE, +$705,000)
The PTO provides reference services and tools to patent examiners and to the public to assist in the conduct of searches. The availability and scope of these services and tools positively affects the timeliness and quality of issued patents. The PTO's Scientific and Technical Information Center (STIC), located in Arlington, Virginia, provides patent examiners and the public with the latest technical references in paper, in microform, or via on-line commercial services. The Patent Search Room allows the public to undertake paper searches prior to formal PTO examination. In either location, patent examiners and other searchers utilize a variety of search tools which are generated by the Search and Information Resources Administration.

Initiatives in FY 1994 propose expansion in on-line commercial data services for patent examiner use and in the paper references available in the STIC for patent examiner and public use. On-line searching in the STIC utilizes experienced STIC staff to perform more complex searches for patent examiners. On-line searching activity is normally associated with prior art searches performed in preparation for issuance of first action notices. An immediate effect of the completed searches is demand for the documents identified in the search. The strong growth in the number of first actions in recent years is largely responsible for a similar growth pattern in on-line searching and in the demand for document service.

Maintenance of the examiner search file is essential to the issuance of high quality patents. The PTO must also provide effective access to certain patent information by Patent Search Room users. Presently, patent documents unofficially placed in the search file by patent examiners are not recorded in the Master Classification File (MCF). Without recordation on the MCF, these "unofficial" references will not be retrievable in the APS image data base. In addition, portions of the search file having high levels of searching activity will show signs of rapid degradation and frequently will contain large numbers of damaged, incomplete, or unlabeled documents. To address this degradation and to provide for replacement of documents missing from the file, the PTO proposes in FY 1994 to enhance an ongoing program which provides for a file integrity review of those

Exhibit 13

portions of the file which are experiencing heavy search activity but are not scheduled for reclassification. The FY 1994 initiative will provide a means for resolving integrity problems as well as insure the completeness and accuracy of the MCF.

Benefits:

- Ensure quality of patent examination through the maintenance of the examiner search file.
- Maintain adequate search tools for quality first action searching.
- Maintain a quality classification system for modern technology.
- Address public and Congressional concerns relating to biotechnology.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Information Dissemination
Subactivity: Data and Document Retrieval Systems
Program Change: Classification Services

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$569
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	65
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	634
12.0	Civilian Personnel Benefits	168
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	1
22.0	Transportation of Things	1
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	38
24.0	Printing and Reproduction	9
25.0	Other Services	958
26.0	Supplies and Materials	306
31.0	Equipment	(449)
99.0	Total Obligations	$1,666

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Information Dissemination
Subactivity:	Data and Document Retrieval Systems
Program Change:	Classification Services

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
Patent Classifiers		GS-14	4	$56,627	$226,508
Searchers		GS-13	2	47,920	95,840
Patent Classifiers		GS-12	5	40,299	201,495
Supervisory Documentation Project Assistant		GS-08	1	25,160	25,160
Documentation Project Assistants		GS-05	6	18,340	110,040
Documentation Project Clerks		GS-04	4	16,393	65,572
Total Positions and Salaries			22		724,615
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted Positions and Salaries			22		724,615
Less: Lapse			- 6	-	155,615
Total Full-Time Permanent			16		$569,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	16
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	16
Authorized Positions:	
Full-Time Permanent	22
Other Than Full-Time Permanent	0
Total Authorized Positions	22

Exhibit 10

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Executive Direction and Administration

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase / (Decrease) From 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Commissioner	Pos./BA	11	$822	10	$746	9	$841	9	$841	0	$0
	FTE/Obl.	9	806	10	702	9		9		0	
Solicitor	Pos./BA	31	2,410	32	2,623	29	2,570	30	2,642	1	72
	FTE/Obl.	30	2,372	32	2,661	29		30		1	
Legislation & International Affairs	Pos./BA	29	1,848	27	1,890	22	1,772	22	1,772	0	0
	FTE/Obl.	19	1,831	26	1,716	21		21		0	
Management Planning	Pos./BA	148	9,657	163	9,978	149	10,717	159	11,480	10	763
	FTE/Obl.	136	9,363	161	10,182	149		156		7	
Administrative Services	Pos./BA	84	3,847	67	3,676	63	3,883	63	3,883	0	0
	FTE/Obl.	78	3,833	74	3,689	70		70		0	
Automation	Pos./BA	237	20,821	231	21,380	202	21,478	202	21,439	0	(39)
	FTE/Obl.	203	20,846	226	21,434	197		197		0	
Space Acquisition and Management	Pos./BA	7	42,294	0	48,769	3	44,218	3	45,285	0	1,067
	FTE/Obl.	3	37,813	0	48,772	4		4		0	
Subtotal	Pos./BA	547	81,699	530	88,748	477	85,446	488	87,309	11	1,863
	FTE/Obl.	476	76,053	529	89,116	479		487		8	
Less: Offsetting Fee Collections	BA	-	63,228	-	71,587	-	66,784	-	68,647	-	1,863
	Obl.	-	57,582	-	71,955						
Financing from Appropriated Funds	BA		18,471		17,161		18,662		18,662		0
	Obl.		18,471		17,161						
Less: Appropriation from Special Fund for Surcharges on Fees	BA	-	16,924	-	17,161	-	18,662	-	18,662	-	0
	Obl.	-	16,924	-	17,161						
General Fund Appropriation Requested	BA		$1,547		$0		$0		$0		$0
	Obl.		1,547		0						

Exhibit 12

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Executive Direction and Administration

Goals and Objectives

Priorities and Goals:

- Managing PTO programs in a manner which promotes high quality, timely, innovative, and cost effective services and products;
- Ensuring that intellectual property law, both in the United States and abroad, protects the interests of U.S. inventors, creators, and businesses;
- Developing advanced automated search, examination and administrative systems to improve the provision of products and services.

Objectives:

- Improve management planning and control processes through automation, systems analysis methodology, and the centralization of financial management and budgetary responsibility.
- Improve the protection of intellectual property rights in the United States and abroad by developing domestic legislation and international agreements.
- Provide support services to all PTO operations promptly and efficiently.
- Administer and manage automation initiatives to aid in developing new search, retrieval and display systems.
- Administer legal, international, legislative, management and automation activities.

Exhibit 12

Base Program

Commissioner

History:

On April 10, 1790, President George Washington signed a bill which laid the foundations of the American patent system. The responsibility for granting patents was placed upon a Board consisting of the Secretary of State, the Secretary of War, and the Attorney General. In 1836 the Board was expanded to include the Commissioner of Patents. During the past 203 years, there have been 52 Commissioners at the Patent and Trademark Office (PTO). As the duties and responsibilities of the head of the PTO evolved and changed, so did the title. The first commissioner was titled "Chief." The title later changed to "Superintendent," and in 1836 the title became "Commissioner of Patents." In 1975 the title of "Commissioner of Patents" was changed to the "Commissioner of Patents and Trademarks." In October 1982 the Commissioner's status was elevated to Assistant Secretary of Commerce and thus the current title, "Assistant Secretary and Commissioner of Patents and Trademarks."

Mission:

In cooperation with the Department of Commerce and the Office of Management and Budget, the Commissioner determines policies and manages PTO programs. The Commissioner directs the examination and issuance of patents, the examination and registration of trademarks, and oversees the dissemination of information contained in patent and trademark documents. The Commissioner renders quasi-judicial rulings on patent and trademark issues arising within the PTO and serves as the Administration's liaison with intellectual property bar associations, industry, the public, and the Congress. The Office of the Commissioner also assists the Department of State, the United States Trade Representative, and DOC bureaus in the development of intellectual property policies, and participates in interagency groups to develop intellectual property recommendations.

Solicitor

The Office of the Solicitor was created in 1922. The Solicitor is the principal legal advisor to the Commissioner. The Solicitor handles all litigation to which the Commissioner is a party, prepares opinions and decisions on legal questions, and provides legal advice and clearances. The Solicitor is subject to the overall authority of the Department's General Counsel with respect to legal matters involving the PTO, except in connection with the issuance of patents and the registration of trademarks.

The Office of Enrollment and Discipline (OED) considers and decides all applications by individuals seeking to register to practice before the Office in patent cases, develops and administers the requisite examination for registration to practice, and maintains a roster of individuals admitted to practice. OED also investigates possible violations of the PTO Code of Professional Responsibility and takes appropriate action where violations of the Code are found.

Legislation and International Affairs

The Assistant Commissioner for External Affairs supervises the Office of Legislation and International Affairs and the Office of Public Affairs.

The Office of Legislation and International Affairs (OLIA) drafts legislative and policy proposals concerning intellectual property matters, prepares supporting documentation to carry out the legislative program and policies of the Commissioner, and reviews and prepares analyses of other legislative proposals concerning intellectual property matters. OLIA prepares Congressional testimony for the Commissioner and other PTO and Departmental officials, maintains a liaison with Congress, the intellectual bar associations, industry, and others concerned with proposed and pending legislation.

Exhibit 12

The OLIA is engaged in multilateral and bilateral negotiations to strengthen intellectual property protection worldwide. OLIA promotes international development of intellectual property systems and advocates improvements and more cost-effective means of protecting intellectual property rights of U.S. nationals throughout the world. Among these efforts are development and maintenance of multilateral systems for protection of intellectual property rights, assisting in the establishment of bilateral agreements with other intellectual property offices, participating in the intellectual property aspects of trade consultations, promoting the establishment of adequate systems in developing countries for the protection of intellectual property rights, and developing international standards and procedures to make it easier for U.S. nationals to obtain rights in other countries and to facilitate access to the information contained in patent and trademark documents. Details are included in the Strengthening Intellectual Property chapter of the Long-Range Plan and the 1994 -1998 Planning Progress Report.

The Office of Public Affairs informs the public of the patent and trademark systems and the operation of the PTO by arranging media meetings for the Commissioner and other senior officials, preparing press releases on PTO activities, and preparing printed materials.

Management Planning

Management planning offices implement budget, fiscal, personnel, civil rights and strategic planning policy. Offices included in the management planning function develop and monitor the long and short-term objectives of the PTO, direct the personnel management programs of the PTO including recruitment and retention, position classification and pay administration, employee development, personnel/payroll and time attendance processing, records administration, benefits and employee/labor relations programs; administer civil rights programs and promote equal opportunity programs; operate a management information system providing current and accurate information on PTO program production and achievement of major milestones; and maintain PTO budgetary and financial systems, including a state-of-the-art financial management and accounting system which became operational in fiscal year 1992.

Administrative Services

Support services funded under this line item include copy reproduction services and maintenance of official records, mail and messenger services, procurement support and contract management, supply, property, and photocopier management, telecommunications, occupational health, safety and security management, and travel services.

Automation

Information resources management is the responsibility of the Office of the Assistant Commissioner for Information Systems. Funds are provided for patent and trademark data base automation, directing, planning and providing automation support for the PTO. Funds also are provided for existing ADP systems as well as for the patent and trademark automation programs, including systems analysis and design, acquisition or development of centralized computer systems, software and automated information systems, installation and test of systems, operation and maintenance of information systems, and operation of general purpose centralized and decentralized ADP and communication equipment.

Space Acquisition and Facilities Management

The PTO leases all of its space from General Services Administration (GSA). Fifteen office buildings in Crystal City, Virginia, make up a majority of the space held by the PTO. This represents 1,274,654 square feet of space. Also, the PTO has another 76,000 square feet located in two warehouses in Springfield, Virginia. This space is used for storing patent and trademark files. Since 1986, the PTO has been responsible for the management of 7 buildings in Crystal City where we are the major Federal leaseholder in the area. The responsibility for managing these buildings rests with the PTO. Management meets this responsibility by planning, directing, coordinating, monitoring, and administering the PTO's delegation agreement for its real property. GSA delegated responsibility to the PTO when it decentralized its lease management functions. A large portion of PTO's funding obligations consists of annual rental payments and management costs for space. An important function of space management is to ensure PTO's

Exhibit 12

facilities are properly equipped. The PTO has sophisticated automated systems that demand additional electrical and special air conditioning requirements. A majority of the leases held by the PTO in Crystal City will expire in fiscal years 1996-97. Therefore, space acquisition staff is responsible for overseeing the competition for future PTO housing in cooperation with GSA. Also, space acquisition staff will coordinate all efforts for occupation of the new space, once a location has been decided. Further details are included in the Space chapter of the Long-Range Plan and the 1994-1998 Planning Progress Report.

Exhibit 12

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data

Commissioner:

The Commissioner testified before Congressional committees on general oversight and authorization, the budget, and other legislative proposals. He continued to implement plans to maintain and reduce in specific technologies, patent and trademark application pendency times, and to automate the Patent and Trademark Office. The Commissioner participated in domestic and International patent and trademark activities. As representative for the Patent and Trademark Office, the Commissioner interacted with various external organizations such as the Public Advisory Committee for Trademark Affairs, American Intellectual Property Law Association, and Intellectual Property Owners Incorporated. He continued to support the Administration's goal to strengthen intellectual property rights through PTO's active participation in negotiations with the World Intellectual Property Organization, General Agreement on Tariffs and Trade (GATT), and Trade-Related Aspects of Intellectual Property (TRIPS). The Commissioner convened the first meeting of the Secretary's Commission on Patent Law Reform in March, 1991. The Advisory Commission held its second meeting in September 1991 to discuss the large volume of responses to the Commission's request for public comment. Three additional meetings of the Advisory Commission were held prior to the presentation of the final report in August of 1992.

Legislation and International Affairs:

The Office of Legislation and International Affairs prepared testimony and urged Congressional action on a wide variety of legislative proposals including those to harmonize national patent laws, to authorize the Office, and to provide compensation to copyright owners whose works are copied using new digital audio technology. In addition, the Office provided technical assistance to the Congressional and the Executive branches on other legislative actions. The Office participated in international efforts to enhance the protection of intellectual property and the administration of intellectual property laws, such as the Diplomatic Conference on the harmonization treaty and various other proposals under discussion under the auspices of the World Intellectual Property Organization. The Office also participated in bilateral negotiations on strengthening intellectual property laws with other countries including Argentina, Hungary, Indonesia, Korea, Poland, The Russian Federation and the other former Soviet Republics, Taiwan, and Thailand. Also, the Office worked with the International Trade Administration within the Department of Commerce, the Department of State, and the Office of the U.S. Trade Representative on trade-related intellectual property issues, such as the negotiation of the international standards within the framework of the GATT and NAFTA, and providing technical assistance in the "Section 301" process.

Automation:

Automated Patent System (APS):
Completed loading of all U.S. patents to High Density Storage Devices (HDDs). Made procurement decisions on acceptance of re-engineered APS workstation for initial deployment. Completed Stage 2 PTOnet (network) planning and tasking, conducted PTOnet system design review, and PTOnet detailed design review. Published Patent Application Management (PAM) system draft for Proposal (RFP), which contains the statement of work, for public comment. Start developmental work on the software needed to implement the automated Patent Copy Sales module of APS. Issued a functional requirements document on providing CD-ROM products to the Patent and Trademark Depository Libraries (PTDLs), the second prototype CD-ROM disc of new patent issues was distributed to the PTDLs, completed implementation of initial automated text search in 14 PTDLs. The Automated Patent System program has resulted in two deployed systems: APS/TEXT Search (APS/TS) and APS/Classified Search and Image Retrieval (CSIR). The APS/TS system provides patent examiners on-line searching of text for most U.S. patents issued since 1970. CSIR has been deployed to groups 210, 220 and part

of 230 of the Patent Examining Corps and will be deployed as scheduled to a fourth group and to the public in 1993. In fiscal 1994 workstations will begin to be deployed in a shared environment for use by all examiners in the remaining Patent Examining Corps groups.

A third system which will begin development in 1993 is the Patent Application Management (PAM) system. The APS/PAM system represents the next major APS development initiative. The PAM system will replace the patent application work flow currently using manual systems for administrative and clerical activities directly associated with review of applications by the Patent Examining Corps. The APS/PAM system will transform the current paper form management application process into an electronic processing system from the receipt of an electronic application, through pre-examination, examination, post examination and electronic publishing.

Trademark Automation:

Completed Trademark search system alternative analysis for T-Search replacement. Completed migration of T-Search system to larger APS mainframe. Completed benefit/cost analysis and functional requirements for T-Search replacement in May, 1992. PTO is replacing the T-SEARCH system with X-SEARCH which is designed to handle expected increases in text data and image data transactions. X-SEARCH is an on-line system that will deliver images to workstations through the PTOnet local area network deployed in 1992. The X-SEARCH is designed to run on personal computers and will support a greater number of concurrent users which will enhance performance and PTO capabilities to handle increases in trademark applications.

Management and Administrative Systems (MAS):

Sensitive security plans were completed and submitted to the Department of Commerce and subsequently revised. A systems inventory was completed and submitted to the Department. A tracking system was established and a verification review process for telecommunications security was completed in fiscal year 1992.

Department of Commerce
Patent and Trademark Office
Summary of Workload and Performance Data
FY 1991 - FY 1994

Performance Measure:	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Executive Direction and Administration:				
Solicitor:				
Cases disposed	128	118	145	150
Freedom of Information Act requests	165	193	185	195
Legal opinions rendered	644	912	800	800
Answers to inquiries	3,460	3,336	3,400	3,450
Notices of Patent and Trademark suits filed	2,133	2,487	2,500	2,500
PTO employee depositions	10	2	15	20
PTO decisions forwarded for publication /1	95	137	125	135
Enrollment and Discipline:				
Applications received for enrollment exam	1,622	2,845	2,500	2,550
Attorneys registered	535	838	1,250	1,275
Disciplinary proceedings	3	4	4	4
Management Planning:				
Personnel actions processed	16,088	17,735	28,100	31,200
Payroll actions processed	14,587	15,437	17,300	19,200
Space Acquisition and Management:				
Office square feet leased	1,043,855	1,118,065	1,226,452	1,261,795
Non-office square feet leased /2	248,913	206,539	206,622	206,622
Total square feet leased	1,292,768	1,324,604	1,433,074	1,468,417
Square feet managed	887,371	1,052,371	1,107,628	1,142,971

/1 Those Board of Patent Appeals and Interferences decisions selected for publication in patent law journals.
/2 Non-office space includes general storage, health units, food service areas, ADP, conference, and training rooms.

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Solicitor	29	29	$2,570	30	30	$2,642	+1	+1	+$72

Increase in Examination Applicants: (+1 permanent position, +1 FTE, +$72,000)
An increase of 1 permanent position, 1 FTE and +$72,000 is necessary to handle the continuing increase in the number of applicants desiring to be admitted as patent attorneys and agents to practice before the PTO. The Office of Enrollment and Discipline develops, administers and grades the examinations that each applicant must take before being admitted. Since 1987, the number of applicants requesting admission to take the examination has increased at a rate of 25 percent each year. The FY 1993 estimate of the number of applicants to be tested was underestimated by 45% as the increase in applicants desiring to take the examination continues to escalate. The FY 1994 estimate of applicants taking the examination is anticipated to be 47.4% higher than the original FY 1993 estimate. This estimate of 2,550 applicants is predicted to level off somewhat in FY 1994, but is anticipated to continue to increase by not less than 2% percent in the outyears. As a related cost of administering the examination, the need for additional examination space offered by the Office of Personnel Management to administer the test is needed for the increase in applicants taking the examination, reflecting a 50% increase over FY 1992 costs. An increase of +$20,000 is requested to accommodate this increase in related costs of administering the examination.

The Office of Enrollment and Discipline also investigates and handles complaints against attorneys brought before the PTO. The Office goal is 12 months disposition. Each action currently takes 9 to 36 months to investigate. In addition to the examination process, each applicant must be screened to determine if he/she meets scientific and technical requirements. In FY 1994 the number of investigations initiated will be 70 with 4 cases needing further disciplinary action. The Office has had to borrow resources from other PTO offices to handle the backlog in disciplinary actions. If the PTO is to continue to register new attorneys and investigate disciplinary actions without adversely affecting other offices, this budget increase is necessary.

Benefits:

- To continue registering attorneys and agents to practice before the PTO.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Executive Direction and Administration
Subactivity: Solicitor
Program Change: Increased Examinations

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$52
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	2
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	54
12.0	Civilian Personnel Benefits	14
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	2
24.0	Printing and Reproduction	3
25.0	Other Services	(2)
26.0	Supplies and Materials	1
31.0	Equipment	0
99.0	Total Obligations	$72

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Solicitor
Program Change: Increased Examinations

Position Title:		GS-Grade		Number of Positions	Annual Salary		Total Salaries
Patent Attorney		GS-15		1	$66,810		$66,810
Total Positions and Salaries				1			66,810
Plus: FY 1994 Pay Raise Adjustment	0.00%			...		+	0
Subtotal - Adjusted Positions and Salaries				1			66,810
Less: Lapse			-	0		-	14,810
Total Full-Time Permanent				1			$52,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	1
Authorized Positions:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Authorized Positions	1

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Management Planning	149	149	$10,717	159	156	$11,480	+10	+7	+$763

The requested management planning resources in this line item can be summarized as follows:

	Personnel	FTE	Amount
Financial Management	+2	+1	$311
Human Resource Management	+8	+6	$452
Total.................	+10	+7	+$763

Management Planning: (+10 permanent positions, +7 FTE, +$763,000)

Financial Management: (+2 permanent positions, +1 FTE, +$311,000)
In FY 1991, PTO began installation of a new financial system because the previous system was clearly outdated and did not provide reports on a timely basis. After examining various systems available, Federal Financial Systems (FFS) was found to be well received at other agencies, and was chosen for implementation. Initial steps to develop procedures and train key employees were undertaken.

FY 1992 marked the beginning of FFS in the PTO. This was a basic system only, as originally set up for the U.S. Geological Survey and now time-shared with PTO per an interagency agreement. Nevertheless, FFS represented a significant improvement over the old, fragmented and incomplete systems previously used. In its first year, FFS integrated the Budget Office's requisition tracking, Procurement Office's purchase tracking, and some of Personnel Office's training data, as well as serving its primary function in the Office of Finance's Accounting Division.

In FY 1993, the Office of Finance will continue working with other program offices to expand the applications for FFS. Plans include a cost allocation module, which is a necessity now that PTO is fully fee funded. Other goals include developing a compensation projection module and expanding the usefulness of FFS for procurement of training services.

In FY 1994, the Office of Finance will make such additions as a budget builder and a travel manager. Screens for entering and accessing data will also be designed for the PTO as well as for individual users. Particularly useful is the graphic user interface, which will allow managers to access information without extensive training.

Exhibit 13

Human Resource Management: (+8 permanent positions, +6 FTE, +$452,000)
The PTO requests an increase of six FTE and $452,000 for FY 1994 in order to conform to the long-standing OPM guideline of a 60:1 ratio between agency staff and Office of Personnel staff. At the same time, PTO will enhance the Human Resources Initiative as documented in the 1993 Congressional Budget. The FTE will be spread evenly through all areas of the Office of Personnel: classification and staffing, employee relations, payroll and information services, labor relations, benefits assistance, and training, for a PTO population of 5,237.

The Office of Personnel has been taking the lead in the Human Resources Management initiative, the goals of which are to recruit, train, and retain quality employees. As PTO workloads increase, personnel requirements will also grow, increasing the resources and staffing needed for the Office of Personnel.

Recruiting has traditionally been difficult for the government, but the PTO faces an especially difficult challenge in filling scientific and engineering positions. Higher private sector salaries for entry level engineers along with tough competition for workers in certain highly skilled occupations (e.g. biotechnology, chemistry, computer science, etc.) continues to present significant challenges to PTO. The Office of Personnel has been designing and testing innovative compensation and benefit plans to make PTO more competitive. In addition to the broad array of recruitment activities which are on-going, PTO has developed and conducted pilot selection systems, emphasizing content-valid selection procedures, structured interviewing techniques, and thorough pre-employment screening.

Overall, employee retention has increased significantly during the last several years. For instance, patent clerical separation rates dropped from a high of 20.67 percent in 1989 to an estimated 9.06 percent in 1992. A similar downward trend in employee turnover has been observed with other occupational groups. The general reduction in PTO-wide turnover rates, however, does not extend to all areas. Of particular importance are the continued high levels of attrition noted for specific occupations, such as biotechnology examiners and Trademark clerical employees.

In 1991, clerical positions were re-classified PTO-wide. In addition, a pilot Quality Skills Center (QSC) for Trademark clerical employees was instituted in Trademark Clerical areas. This Trademark QSC was so successful in 1991 that participation was extended in 1992 to the offices under Public Services and Administration. In FY 1993, the Office of Personnel is tailoring the program to other major offices within PTO and has begun a trial program that consists of a mandatory two-week QSC introductory training program at entry date for all new clerical hires. This program will be followed by a planned series of courses based on the employee's needs and the curriculum for the organization to which the employee is assigned. In FY 1994, the QSC will be fully operational with tested components of mandatory and individually determined training for all new hires and a continuing education program for all clerical staff. The program will have the flexibility to change as needed to meet organizational dynamics and labor market influences.

Creating and sustaining a human resources management program in the complex and unique environment in which the PTO operates requires substantial investments of employee effort and adequate funding. For example, the complexity of managing three active unions, with a high volume of negotiations and third party activity, is unique in the Federal sector, and the PTO is the only bureau in Commerce with this task.

Personnel staff support also is needed for PTO's administration of a special productivity gain sharing awards program and for the recruitment and retention strategies which have been pioneered during FY 1992. New efforts are slated to address specific needs such as succession planning, managerial and supervisory development, improved selection processes, expanded pre-employment screening, examination of certain aspects of employee turnover and placement, and a broadening of employee benefit services.

By maintaining the 60:1 Personnel staffing ratio, PTO will be able to maintain productivity, thus saving on the need for additional new PTO employees and overtime. In addition, sound management of human resources will continue to contribute to PTO quality and productivity through streamlined recruitment activities, improved selection techniques, reduced turnover and a favorable work environment.

Providing the requested funding for Human Resources Management and the maintenance of the Personnel Staffing Ratio will both increase productivity and reduce costs.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Executive Direction and Administration
Subactivity:	Management Planning
Program Change:	Financial Systems / Human Resources

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$293
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	16
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	308
12.0	Civilian Personnel Benefits	82
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	66
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	4
23.3	Communications, Utilities, and Misc. Charges	10
24.0	Printing and Reproduction	8
25.0	Other Services	268
26.0	Supplies and Materials	6
31.0	Equipment	(3)
99.0	Total Obligations	$763

Exhibit 14

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity:	Executive Direction and Administration
Subactivity:	Management Planning
Program Change:	Financial Systems / Human Resources

Position Title:		GS-Grade	Number of Positions	Annual Salary	Total Salaries
Labor Relation / Position Management Specialists		GS-13	4	$47,920	$191,680
System Accountants		GS-12	2	40,299	80,598
Employee Relation Specialists		GS-09	2	27,790	55,580
Personnel Assistants		GS-07	2	22,717	45,434
Total Positions and Salaries			10		373,292
Plus: FY 1994 Pay Raise Adjustment	0.00%		...	+	0
Subtotal - Adjusted Positions and Salaries			10		373,292
Less: Lapse			- 3	-	80,292
Total Full-Time Permanent			7		$293,000

Personnel Data:	Number
Full-Time Equivalent Employment:	
Full-Time Permanent	7
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment	7
Authorized Positions:	
Full-Time Permanent	10
Other Than Full-Time Permanent	0
Total Authorized Positions	10

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Automation	202	197	$21,475	202	197	$21,436	0	0	-$39

Automation: (0 permanent positions, 0 FTE, -$39,000)

Automation: (0 permanent positions, 0 FTE, -$39,000)
The PTO requests a reduction of $39,000 in engineering and building maintenance services provided to the agency by contractor staff. The 1994 budget proposes a level of personnel growth less than in prior years. Hence, support services relative to a rapidly growing population are not required.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Executive Direction and Administration
Subactivity:	Automation
Program Change:	Automation

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$0
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	0
12.0	Civilian Personnel Benefits	0
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	0
24.0	Printing and Reproduction	0
25.0	Other Services	(39)
26.0	Supplies and Materials	0
31.0	Equipment	0
99.0	Total Obligations	($39)

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base			1994 Estimate			Increase/Decrease		
	Personnel	FTE	Amount	Personnel	FTE	Amount	Personnel	FTE	Amount
Space Acquisition and Management	3	4	$44,218	3	4	$45,275	0	0	+$1,057

Space for New Hires: (0 permanent positions, 0 FTE, +$1,057,000)
The PTO continues to need additional leased space in the Crystal City complex. The size of the Patent and Trademark Office staff has resulted in overcrowding of PTO office space. In FY 1991 the PTO acquired two new leased buildings to house patent examiners and trademark attorneys. In FY 1992, the PTO acquired several floors of an existing building to house patent examiners. Additional acquisitions of space in existing buildings will be made in FY 1993 to house patent examiners. During FY 1994, the PTO will be expanding operations and implementing additional automated systems to improve the economy and efficiency of the PTO. To accommodate this expansion, the PTO will need an additional 35,343 square feet of office space. At the 1994 rate of $29.92 per square foot, this acquisition will cost the PTO an additional $1,057,000. Failure to acquire this space will prevent the achievement and maintenance of the PTO's primary goals, as well as impair the economical and efficient operation required by our users.

Exhibit 15

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity:	Executive Direction and Administration
Subactivity:	Space Acquisition and Management
Program Change:	Space Acquisition and Management

Object Class	Object Class Title	FY 1994 Increase (Decrease)
11.0	Personnel Compensation:	
11.1	Full-Time Permanent Compensation	$0
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
11.8	Special Personnel Services Payments	0
11.9	Total Personnel Compensation	0
12.0	Civilian Personnel Benefits	0
13.0	Benefits for Former Personnel	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	1,057
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Misc. Charges	0
24.0	Printing and Reproduction	0
25.0	Other Services	0
26.0	Supplies and Materials	0
31.0	Equipment	0
99.0	Total Obligations	$1,057

Automation Master Plan Summary

Table 1 bridges from the line item format to the three main systems. These systems are defined as follows:

Automated Patent System

The automation of patent related activities within the PTO through the implementation of the Automated Patent System (APS). APS includes automation of the patent databases which include systems for image and text capture. Cost projections represent current cost estimates of the APS contract, as well as cost estimates for APS contract support. Starting in FY 1991, cost projections include PTO Automation staff and support for APS.

Trademark Automation

The automation of trademark searching activities within the PTO through implementation of the Trademark Search System (T-SEARCH) through 1986, and the automation of trademark processing activities within the PTO through TRAM and T-Search from 1987 on. Starting in FY 1991, cost projections include PTO Automation staff and support for Trademark Automation.

Management and Administrative Systems

Those automation activities which support existing ADP systems and both the patent and trademark automation programs. Included in this category are the automation staff, various support contracts and the existing computer facility and related operations that monitor patent and trademark process flows, and perform accounting and management information functions. Starting in FY 1991 cost projections for PTO automation staff directly supporting the patent automation or the trademark automation programs are included in those systems.

THE REVISED PLAN AMOUNTS INCLUDE PRIOR YEAR UNOBLIGATED BALANCES.

TABLE 1.

REVISED AMP--LIN CROSSWALK TO NEW SYSTEMS
$000'S--INCLUDES . ATION OUTYEARS 1995-1998

BUDGET ACTIVITY	YEAR	AUTOMATED PATENT SYSTEM	TRADEMARK AUTOMATION	MANAGEMENT & ADMINISTRATIVE SYSTEMS	PLAN TOTAL	ADJUSTMENTS /CARRYOVER	REVISED PLAN	ACTUAL TOTAL	BALANCE
PATENT PROCESS	1983	1,860	0	1,215	3,075	0	3,075	2,225	850
	1984	5,120	0	1,100	6,220	850	7,070	7,154	(84)
	1985	10,331	0	75	10,406	0	10,406	10,306	100
	1986	13,518	0	700	14,218	329	14,547	14,289	258
	1987	23,945	0	500	24,445	258	24,703	24,790	(87)
	1988	30,379	0	300	30,679	3,002	33,681	32,985	696
	1989	24,667	0	310	24,977	3,453	28,430	27,786	644
	1990	13,062	0	265	13,327	5,818	19,145	19,120	25
	1991	26,579	0	0	26,579	(1,247)	25,332	25,332	0
	1992	49,162	0	3,526	52,688	1,449	54,137	54,137	0
	1993	54,240	0	242	54,482	3,000	57,482		
	1994	60,430	0	3,266	63,696				
	1995	72,599	0	3,319	75,918				
	1996	81,884	0	3,378	85,262				
	1997	82,571	0	3,440	86,011				
	1998	86,406	0	3,491	89,897				
TRADEMARK PROCESS	1983	0	416	517	933	0	933	517	416
	1984	0	580	0	580	416	996	996	0
	1985	0	305	0	305	200	505	581	(76)
	1986	0	1,133	0	1,133	0	1,133	1,263	(130)
	1987	0	2,085	0	2,085	0	2,085	710	1,375
	1988	0	2,056	0	2,056	1,375	3,431	1,973	1,458
	1989	0	2,126	0	2,126	1,458	3,584	2,509	1,075
	1990	0	1,849	0	1,849	823	2,672	2,443	229
	1991	0	3,330	0	3,330	0	3,330	2,304	1,026
	1992	0	4,447	0	4,447	348	4,795	3,749	1,046
	1993	0	5,606	0	5,606	1,046	6,652		
	1994	0	5,713	0	5,713				
	1995	0	6,089	0	6,089				
	1996	0	6,462	0	6,462				
	1997	0	6,877	0	6,877				
	1998	0	7,114	0	7,114				
INFORMATION DISSEMINATION	1983	400	0	100	500	0	500	250	250
	1984	1,180	0	20	1,200	250	1,450	1,230	220
	1985	3,885	0	140	4,025	0	4,025	4,025	0
	1986	8,598	0	0	8,598	0	8,598	8,272	326
	1987	8,595	0	0	8,595	129	8,724	8,914	(190)
	1988	9,318	0	0	9,318	(180)	9,138	9,024	114
	1989	11,598	0	0	11,598	898	12,496	12,310	186
	1990	13,147	0	0	13,147	1,079	14,226	14,226	0
	1991	12,119	0	342	12,461	(100)	12,361	11,180	1,181
	1992	2,817	0	0	2,817	1,228	4,045	4,004	41
	1993	2,643	0	0	2,643	41	2,684		
	1994	3,071	0	0	3,071				
	1995	6,225	0	0	6,225				
	1996	7,209	0	0	7,209				
	1997	7,589	0	0	7,589				
	1998	7,862	0	0	7,862				

TABLE 1.

REVISED AMP–LINE ITEM CROSSWALK TO NEW SYSTEMS
$000'S—INCLUDES INFLATION OUTYEARS 1995-1998

BUDGET ACTIVITY	YEAR	AUTOMATED PATENT SYSTEM	TRADEMARK AUTOMATION	MANAGEMENT & ADMINISTRATIVE SYSTEMS	PLAN TOTAL	ADJUSTMENTS /CARRYOVER	REVISED PLAN	ACTUAL TOTAL	BALANCE
EXECUTIVE DIRECTION AND ADMINISTRATION	1983	2,141	0	7,455	9,596	933	10,529	9,596	933
	1984	392	225	10,650	11,267	1,218	12,485	12,423	62
	1985	838	2,338	13,146	16,322	0	16,322	15,456	866
	1986	2,400	0	11,601	14,001	2,545	16,546	15,167	1,379
	1987	2,916	0	11,664	14,580	7,716	22,296	20,779	1,517
	1988	8,279	0	14,556	22,835	1,543	24,378	24,184	194
	1989	9,730	0	14,755	24,485	5,179	29,664	26,503	3,161
	1990	9,163	0	13,875	23,038	5,365	28,403	28,088	315
	1991	9,474	0	16,277	25,751	(595)	25,156	24,820	336
	1992	0	0	20,581	20,581	340	20,921	20,846	75
	1993	0	0	21,359	21,359	75	21,434		
	1994	0	0	21,436	21,436				
	1995	0	0	22,316	22,316				
	1996	0	0	23,466	23,466				
	1997	0	0	24,750	24,750				
	1998	0	0	24,661	24,661				
TOTAL	1983	4,401	416	9,287	14,104	933	15,037	12,588	2,449
	1984	6,692	805	11,770	19,267	2,734	22,001	21,803	198
	1985	15,054	2,644	13,360	31,058	200	31,258	30,368	890
	1986	25,616	1,133	12,201	38,950	2,874	41,824	39,991	1,833
	1987	35,456	2,085	12,164	49,705	8,103	57,808	55,193	2,615
	1988	47,976	2,058	14,854	64,888	5,740	70,628	68,166	2,462
	1989	45,995	2,128	15,065	63,188	10,986	74,174	69,106	5,068
	1990	35,372	1,849	14,140	51,361	13,085	64,446	63,577	869
	1991	46,172	3,330	16,619	66,121	(1,942)	64,179	61,636	2,543
	1992	51,979	4,447	24,107	80,533	3,365	83,898	82,736	1,162
	1993	57,083	5,606	21,601	84,290	4,162	88,452		
	1994	63,501	5,713	24,702	93,916				
	1995	77,624	6,089	25,935	109,648				
	1996	87,093	6,482	28,846	122,421				
	1997	70,160	6,877	28,190	105,227				
	1998	64,268	7,114	28,172	99,554				

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1 From 1983 - 1990, all personnel costs associated with APS, Trademark Automation, and MAS were centralized in the MAS account. For those years, therefore, APS and Trademark Automation costs are understated.

Table 2, which follows, takes the three systems' inflated totals from the bottom of Table 1 and divides them into the categories defined as follows:

Baseline Operations
"Baseline Operations" consist of the normal maintenance and refinement of existing automated systems and the associated hardware and software. Resources committed to Baseline Operations permit the evolutionary development of the automated systems as well as the routine replacement of equipment. Additional hardware components associated with normal growth of ongoing operations or staff requiring access to a system are considered to be part of "Baseline Operations."

Development
"Development" activities and initiatives represent new functional capabilities which are not derivable through the normal extension of existing (baseline) capabilities. In some instances developmental activities result in the replacement of existing systems. In other instances, entirely new capabilities may be developed for existing systems.

TABLE 2.

SYSTEMS CROSSWALK TO OPERATIONS AND DEVELOPMENT
$000'S - INCLUDES INFLATION IN OUTYEARS 1995 - 1998

SYSTEM	YEAR	BASELINE OPERATIONS	DEVELOPMENT	SYSTEM TOTAL	CARRYOVER/ ADJUSTMENTS	SYSTEM TOTAL	ACTUAL TOTAL	BALANCE
	1991			45,172	(1,306)	43,866	43,726	140
AUTOMATED	1992	21,991	29,988	51,979	2,348	54,327	54,286	41
PATENT SYSTEM	1993	32,096	24,987	57,083	3,041	60,124		
-APS-	1994	33,678	29,823	63,501				
	1995	43,602	34,222	77,824				
	1996	46,437	43,656	90,093				
	1997	37,886	32,274	70,160				
	1998	37,275	26,993	64,268				
	1991			3,330	0	3,330	2,304	1,026
TRADEMARK	1992	3,497	950	4,447	348	4,795	3,749	1,046
AUTOMATION	1993	4,331	1,275	5,606	1,046	6,652		
	1994	4,737	976	5,713				
	1995	4,944	1,145	6,089				
	1996	882	5,600	6,482				
	1997	6,060	817	6,877				
	1998	6,027	1,087	7,114				
	1991			19,619	(636)	18,983	17,606	1,377
MANAGEMENT AND	1992	23,514	593	24,107	669	24,776	24,701	75
ADMINISTRATIVE	1993	21,601	0	21,601	75	21,676		
SYSTEMS	1994	24,702	0	24,702				
-MAS-	1995	25,635	0	25,635				
	1996	25,846	0	25,846				
	1997	28,190	0	28,190				
	1998	28,172	0	28,172				
	1991			68,121	(1,942)	66,179	63,636	2,543
TOTAL	1992	49,002	31,531	80,533	3,365	83,898	82,736	1,162
	1993	58,028	26,262	84,290	4,162	88,452		
	1994	63,117	30,799	93,916				
	1995	74,181	35,367	109,548				
	1996	73,166	49,256	122,421				
	1997	72,136	33,091	105,227				
	1998	71,474	28,080	99,554				

Changes for FY 1994 Automation Summary

Automated Patent System (APS)

Funding in FY 1994 for the Automated Patent Systems is provided by the following budget activities:

		1994 Base		1994 Estimate		Increase/Decrease	
Budget Activity		Personnel	Amount	Personnel	Amount	Personnel	Amount
Patent Process	Pos.	59	$55,504	59	$60,430	0	$4,926
	FTE	58		58		0	
Information Dissemination	Pos.	19	3,071	19	3,071	0	0
	FTE	18		18		0	
TOTAL	Pos.	78	$58,575	78	$63,501	0	$4,926
	FTE	76		76		0	

With the funding provided by this budget request, the following major activities will occur:

- Complete evaluation of electronic application rule and designs for Automated Patent System for the Patent Application Management system (PAM).
- Complete deployment of Classified Search and Image Retrieval (CSIR) for patent examiners in a casino environment.
- The 1994 total APS estimate of $63,501,000 includes $6,739,000 for development of electronic filing and photocomposition for the Patent Application Management (APS/PAM) system. PAM funding is derived from a base of $1,141,000 and a program increase of $5,598,000. Other APS funding of $56,762,000 is derived from a base of $57,434,000 and a program decrease of $672,000.

Changes for FY 1994 Automation Summary

Trademark Automation

Funding in FY 1994 for Trademark Automation is provided as follows:

		1994 Base		1994 Estimate		Increase/Decrease	
Budget Activity		Personnel	Amount	Personnel	Amount	Personnel	Amount
Trademark Process	Pos.	30	$5,713	30	$5,713	0	$0
	FTE	29		29		0	

With the funding provided by this budget request, the following major activities will occur:

- Modernization of the T-Search terminal component (hardware and software) to improve system performance.
- Develop CD - ROM trademark search products for use within the PTO and the Patent and Trademark Depository Libraries.
- Implementation of X-Search version 1.1 in FY 1994, which replaces the Orbit mainframe search software.

Management and Administrative Systems (MAS)

Funding in FY 1994 for Management and Administrative Systems is provided by the following budget activities:

		1994 Base		1994 Estimate		Increase/Decrease	
Budget Activity		Personnel	Amount	Personnel	Amount	Personnel	Amount
Patent Process	Pos.	10	$242	10	$3,266	0	$3,024
	FTE	10		10		0	
Executive Direction and Administration	Pos.	202	21,475	202	21,436	0	(39)
	FTE	197		197		0	
TOTAL	Pos.	212	$21,717	212	$24,702	0	$2,985
	FTE	207		207		0	

With the funding provided by this budget request, the following major activities will occur:

- Contractor support to assist in the development of policies and procedures in the area of Quality Assurance, Configuration Management, contractual services for customer support and ADP supplies.
- Continuance of a microcomputer hardware and software products procurement program called MICRO I for PTO organizations.
- Complete deployment of the PTOnet communication network which will provide data traffic flow control and security.

Revised Automation Master Plan Summary
Actual FY 1992 Summary

The following section is included in response to a directive from the House Committee on Appropriations included in the House of Representatives Report No. 98-226 which states:

> "The Committee directs the Patent and Trademark Office to include in each year's budget justification a comparison of the planned costs and benefits and the planned schedule...versus the actual costs, benefits and schedule."

1. Planned versus Actual Costs

The following tables compare plan versus actual obligations in FY 1992 in two ways: by budget activity and by the system categories.

FY 1992 Automation Obligations by Budget Activity
(dollar amounts in thousands)

	Patent Process	Trademark Process	Information Dissemination	Executive Direction and Administration	Total
Budget Plan	$52,688	$4,447	$2,817	$20,581	$80,533
Prior Year Funds/Adjustments	1,449	348	1,228	340	3,365
Total Available	54,137	4,795	4,045	20,921	83,898
Actual Obligations	54,137	3,749	4,004	20,846	82,736
Balance	$0	$1,046	$41	$75	$1,162

FY 1992 Automation Obligations by Major System Category
(dollars in thousands)

	Automated Patent System	Trademark Automation	Management and Administrative Systems	Total
Budget Plan	$51,979	$4,447	$24,107	$80,533
Prior Year Funds/Adjustments	2,348	348	669	3,365
Total Available	54,327	4,795	24,776	83,898
Actual Obligations	54,286	3,749	24,701	82,736
Balance	$41	$1,046	$75	$1,162

Unobligated balances of $1,162,000 in FY 1992 were unavoidable and due primarily to delays in procurement processing.

The following provides more detail on obligations within the major system categories (dollars in thousands):

Automated Patent System: Obligations - $54,286
- The Automated Patent System (APS) prime contract for equipment, software and contractor services.
- Independent Verification and Validation (I. V. & V.) activities related to the APS prime contract.
- Technical support activities provided contractor.
- PTO Automation staff for APS.
- Miscellaneous costs related to system management and support.

Trademark Automation: Obligations - $3,749
- T-Search contract for lease and maintenance of equipment and software for T-Search System.
- Trademark share of rental and maintenance of current systems for TRAM.
- Trademark share of Lot B peripheral equipment.
- PTO Automation staff for trademark automation.
- Other miscellaneous expenses.

Management and Administrative Systems: Obligations - $24,701
- Compensation and benefits for Office of Information Systems staff not under APS or Trademark Automation.
- Rental and maintenance for non-Trademark portion of current systems.
- Support contracts for current systems.
- Travel, shipping, and printing.
- Miscellaneous rentals, supplies, equipment, services and maintenance.

Schedule of Major Automation Events FY 1992 through FY 1993	1993 Congressional Schedule	1994 Congressional Schedule	Comments
Automated Patent System (APS)			
Full Text Search:			
Deploy APS Text Search to fourteen PDL's	4th Qtr/1991	N/A	Completed.
Classified Image Search and Retrieval:			
Extend APS image search and retrieval to second examining group	1st Qtr/1991	N/A	Completed.
Begin load of all U.S. patent images to high density storage devices	1st Qtr/1991	N/A	Completed.
Complete load of last 20 years of U.S. patent images to high density storage devices.	2nd Qtr/1992	N/A	Completed.
Complete load of all U.S. patent images to high density storage devices	4th Qtr/1992	N/A	Completed.
Begin load of third group's patent images and 20 yr. backfile to rapid access storage devices	4th Qtr/1992	4th Qtr/1992	Completed.
Complete load of third group's patent images to rapid access storage devices	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Complete load of 20 yr. backfile of patent images to rapid access storage devices	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Begin expansion of CSIR capabilities to third group	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Complete expansion of CSIR capabilities to 3rd group	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Begin initial horizontal deployment of CSIR to public and examiners	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Complete initial horizontal deployment of CSIR to public	3rd Qtr/1993	3rd Qtr/1993	On schedule.
Complete initial horizontal deployment of CSIR to examiners	3rd Qtr/1994	3rd Qtr/1994	On schedule.

Schedule of Major Automation Events FY 1992 through FY 1994	1993 Congressional Schedule	1994 Congressional Schedule	Comments
Begin load of foreign patent images to high density storage devices	4th Qtr/1993	4th Qtr/1993	On schedule.
Patent and Trademark Copy Sales release 1.0 declared operational	3rd Qtr/1992	3rd Qtr/1992	Completed.
Complete load of foreign 1.0 database	N/A	2nd Qtr/1994	New Milestone.
Foreign Patent 1.0 operational	N/A	3rd Qtr/1994	New Milestone.
Office Automation			
Issue Micro 1 (Project 4000) Hardware RFP	2nd Qtr/1991	N/A	Completed.
Issue Micro 1 (Project 4000) Software IFB	3rd Qtr/1991	N/A	Completed.
Award Micro 1 (Project 4000) Hardware Contract	4th Qtr/1991	N/A	Completed.
Award Micro 1 (Project 4000) Software Contract	4th Qtr/1991	N/A	Completed.
Trademark Automation (TRAM, T-Search)			
Implement new assignment capability	4th Qtr/1991	N/A	Completed.
Develop functional requirements document for 2nd generation automated trademark systems	2nd Qtr/1991	N/A	Completed.
Create trademark text CD-ROM data file	1st Qtr/1991	N/A	Completed.
Award T-Search Development contract	2nd Qtr/1992	N/A	Project has been revised to replace T-Search with X-Search version 1.0 (which replaces current terminal user interface software) and version 1.1 (which replaces the Orbit mainframe search software).
Complete development of X-Search Version 1.0 software	3rd Qtr/1993	N/A	Completed.
Award X-Search Version 1.1 contract	2nd Qtr/1993	2nd Qtr/1993	On schedule.
Implement X-Search version 1.1	N/A	4th Qtr/1994	New Milestone.

Schedule of Major Automation Events FY 1992 through FY 1994	1993 Congressional Schedule	1994 Congressional Schedule	Comments
Management and Administrative Systems			
Complete design review for PTOnet requirements for patent text and image data transmissions	1st Qtr/1992	1st Qtr/1992	Completed.
Patent Application Management (PAM)			
Issue RFP for PAM contractor	N/A	4th Qtr/1993	New Milestone.
Award 8A PAM integration contract	N/A	4th Qtr/1994	New Milestone.

Exhibit 10

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Offsetting Fee Collections

Offsetting Fee Collections:		1992 Actual Amount	1993 Currently Available Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) From 1994 Base Amount
Patent Process	BA	$197,499	$224,793	$223,226	$251,477	$28,251
	Obl.	184,311	233,369			
Trademark Process	BA	35,904	33,192	36,174	36,879	1,706
	Obl.	31,993	37,093			
Information Dissemination	BA	50,841	57,428	56,906	58,690	1,783
	Obl.	50,164	56,116			
Executive Direction and Administration	BA	63,228	71,587	66,784	68,637	1,853
	Obl.	67,592	71,966			
Total Offsetting Fee Collections	BA	347,472	387,000	382,000	415,892	33,892
	Obl.	333,960	400,622			
Less: Prior Year Unobligated Balances	BA	- 12,570	- 0	- 0	- 0	- 0
	Obl.	- 0	- 13,622			
Less: Recoveries of Prior Year Obligations	BA	- 2,013	- 0	- 0	- 0	- 0
	Obl.	- 0	- 0			
Current Year Offsetting Fee Collections	BA	$332,889	$387,000	$382,000	$415,892	$33,892
	Obl.	333,960	387,000			

Exhibit 12

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Offsetting Fee Collections and Receipts

Goals

Under PTO's current legislation, the Office receives all of its funding through user fees. The goals of this activity are:

- To collect sufficient income to sustain PTO programs at funding levels which provide the resources and staffing needed to meet program goals and objectives, thereby ensuring the continued stability of patent and trademark systems and delivery of customer services.

- To structure user fees so that they encourage filings by individual inventors, small companies, and other organizations that do not have substantial resources at their disposal for prosecuting patent and trademark applications.

- To support program goals including patent pendency of 18 months to issue or abandonment; trademark pendency of 3 months to first action, and 13 months to registration or abandonment for use cases; and automation of patent and trademark processes and information dissemination.

Objectives

The PTO assesses and projects fee workloads and income, and derives fee requirements that meet the operational needs of the Office. All program costs will be restricted to levels that are recoverable by fees. Patent fees will recover patent costs and trademark fees will recover trademark costs. The Office will recover administrative expenses and other indirect costs such as space rent, general automation costs, and miscellaneous general expenses, with equitable amounts of patent and trademark fees.

Exhibit 12

Base Program

The costs of the PTO in fiscal year 1994 will be limited to the amount of fee income available. All funds received by the PTO will be from user fees, with no funding from taxpayer revenue.

The PTO's four major fee categories under Public Law 102-204 (PTO Authorization Act of 1991) remain unchanged. The four fee categories are:

1) Patent statutory fees - Statutory fees are comprised of patent processing and maintenance fees, with the inclusion of certain Patent Cooperation Treaty (PCT) application and maintenance fees. A surcharge is applied to all patent statutory fees as part of the budget deficit provisions of the Omnibus Budget Reconciliation Act of 1990. The planned surcharge deposit for fiscal year 1994 is $103 million. Individual inventors, non-profit corporations, and small businesses can qualify for a small entity subsidy on all patent statutory fees, which reduces the fee amount by 50 percent. The Commissioner has the authority to adjust the patent statutory fees at the beginning of each fiscal year by the previous fiscal year's change in the Consumer Price Index (CPI).

2) Patent non-statutory fees - Non-statutory patent fees consist of patent fees for products, services, and processing fees not included under the patent statutory or PCT fees. The Commissioner has permanent authority to annually adjust these fees to recover costs.

3) Trademark fees - These fees encompass all trademark processing, materials, and service fees. The Commissioner has permanent authority to adjust fees in the aggregate every year by the change in the CPI. There is also a "fence" around trademark fees which prohibits the use of trademark fees for non-trademark activities.

4) Patent Cooperation Treaty (PCT) fees - These fees include all PCT fees not covered by the patent statutory fees. With the exception of those PCT fee amounts set by the World Intellectual Property Organization (WIPO), the Commissioner is authorized to adjust PCT fees to recover costs.

Patent and PCT Fee Adjustments - For fiscal year 1994, patent statutory and non-statutory, and PCT fees will remain at fiscal year 1993 fee rates. An adjustment to these fees for inflation is not required in 1994 due to mandated administrative and personnel savings of $14.8 million, and to a reduction in PTO space rent rates that will generate rent cost savings of $6.8 million, for a total savings of $21.6 million.

Trademark Fee Adjustments - The PTO is proposing a one-time increase in the trademark application fee above the increase in CPI. This increase would raise the application fee from $210 in fiscal year 1993 to $245 in fiscal year 1994. As discussed in the Examination of Trademarks increase narrative, when the Omnibus Budget Reconciliation Act of 1990 was implemented, Trademarks was required to fund its share of PTO's administrative and public service functions. However, in fiscal year 1992, trademark fee income was set at $7 million below the amount required to fully fund direct trademark operations and related administrative and public service functions. Since fiscal year 1991, these shortfalls have been funded with unobligated balances from prior years. However, the Office does not anticipate that any unobligated balances will be brought forward into fiscal year 1994.

Total trademark expenses for 1994, including direct, administrative, and public service functions, are estimated to be $48.547 million. Estimated fiscal year 1994 trademark fee workloads at fiscal year 1993 fee rates result in fee income of $43.717 million, for a shortfall of $4.83 million. Even an increase in trademark fee income by the change in the CPI would result in a substantial shortfall. As a result, the PTO has decided to request an increase in trademark fee income above CPI in order to fully fund the trademark operation and continue to provide timely trademark examination and services to the public.

Offsetting fees and receipts from surcharge fees for 1992, 1993, and 1994 are shown on the following page.

Summary of Offsetting Fees, Surcharge Fees, and Budget Authority
(Dollar Amounts in Thousands)

Offsetting Fees, Surcharge Fees, and Budget Authority:	1992 Actual Amount	1993 Currently Available Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) from 1994 Base Amount
Offsetting Fee Collections	332,890	387,000	382,090	415,692	33,602
Appropriation from Surcharge Fees	86,894	86,672	103,000	103,000	0
Appropriation from General Fund of Treasury	1,547	0	0	0	0
Unobligated funds from prior year	12,570	13,522	0	0	0
Recoveries of prior year obligations	2,012	0	0	0	0
Total Resources Available	435,913	487,194	485,090	518,692	33,602

Summary of Patent and Trademark Funding
(Dollar Amounts in Thousands)

Patent and Trademark Funding:	1992 Actual Amount	1993 Currently Available Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) from 1994 Base Amount
Patent Offsetting Fee Collections	295,331	346,198	338,373	367,145	28,772
Plus: Financing from Prior Year Patent Funds	2,800	9,621	0	0	0
Plus: Recoveries of Prior Year Patent Obligations	1,701	0	0	0	0
Plus: Appropriation from Surcharge Fees	86,894	86,672	103,000	103,000	0
Plus: Appropriation from General Fund of Treasury	1,547	0	0	0	0
Total Patent Funding	388,273	442,491	441,373	470,145	28,772
Trademark Offsetting Fee Collections	37,559	40,802	43,717	48,547	4,830
Plus: Financing from Prior Year Trademark Funds	9,770	3,901	0	0	0
Plus: Recoveries of Prior Year Trademark Obligations	311	0	0	0	0
Total Trademark Funding	47,640	44,703	43,717	48,547	4,830
Total Patent and Trademark Funding	435,913	487,194	485,090	518,692	33,602
Patent Obligations	378,652	442,491	441,373	470,145	28,772
Trademark Obligations	43,739	44,703	43,717	48,547	4,830
Total Patent and Trademark Obligations	422,391	487,194	485,090	518,692	33,602

Exhibit 13

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1994
(Obligations in Thousands)

	1994 Base	1994 Estimate	Increase/Decrease
Offsetting Fee Collections	$485,090	$518,692	+$33,602

The FY 1994 fee estimate was derived by multiplying the FY 1993 fee rates by the FY 1994 workload estimates provided in this budget. The only exception is the one-time increase above CPI for the trademark application fee. Public Law 102-204 requires that the Patent and Trademark Office be completely funded by fees in FY 1994. This legislation offsets the requirements for all appropriated funds from the General Fund of the Treasury, and helps to reduce the financial burden on the US taxpayer.

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
	Personnel Compensation:					
11.1	Full-Time Permanent Compensation	$182,023	$206,268	$207,440	$218,634	$11,194
11.3	Other Than Full-Time Permanent Compensation	3,888	3,746	3,790	3,790	0
11.5	Other Personnel Compensation	12,338	16,969	17,003	21,636	4,633
	Total Personnel Compensation	197,813	226,983	228,233	244,060	15,827
12.0	Personnel Benefits	38,128	44,876	48,193	51,308	3,115
13.0	Benefits for Former Personnel	103	120	120	140	20
21.0	Travel and Transportation of Persons	881	764	748	845	97
22.0	Transportation of Things	118	1,031	1,017	1,355	338
23.1	Rental Payments to GSA	36,604	46,111	43,830	44,887	1,057
23.2	Rental Payments to Others	276	174	176	187	11
23.3	Communications, Utilities, and Misc. Charges	7,729	12,828	12,002	12,439	437
24.0	Printing and Reproduction	31,644	32,329	33,563	36,370	2,808
25.1	Consulting Services	172	200	200	220	20
25.2	Other Services	92,947	103,706	98,147	108,054	9,907
26.0	Supplies and Materials	8,206	8,840	6,641	7,587	946
31.0	Equipment	10,784	12,096	12,124	11,143	(981)
32.0	Lands and Structures	0	0	0	0	0
33.0	Investments and Loans	0	0	0	0	0
41.0	Grants, Subsidies and Contributions	0	0	0	0	0
42.0	Insurance Claims and Indemnities	284	300	300	300	0
43.0	Interest and Dividends	0	0	0	0	0
44.0	Refunds	0	0	0	0	0
	Total Obligations	422,391	487,194	485,090	518,692	33,602
	Less: Offsetting Fees	333,950	387,000	382,090	415,692	33,602
	Less: Financing from PY Unobligated Balance		13,822			
	Appropriation Requested	88,441	86,372	103,000	103,000	0
	Less: Appropriation from Special Fund for Surcharges on Fees	86,594	86,372	103,000	103,000	0
	Appropriation from General Fund	$1,847	$0	$0	$0	$0

Exhibit 16

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
PERSONNEL DETAIL

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
	Full-Time Equivalent Employment:					
	Full-Time Permanent	4,478	4,946	4,747	4,883	136
	Other Than Full-Time Permanent	111	90	90	90	0
	Total Full-Time Equivalent Employment	4,589	5,036	4,837	4,973	136
	Authorized Positions:					
	Full-Time Permanent	5,852	5,291	5,006	5,237	231
	Other Than Full-Time Permanent	252	252	252	252	0
	Total Authorized Positions	6,104	5,543	5,258	5,489	231

Exhibit 17

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
11	Personnel Compensation:					
11.1	Full-Time Permanent Positions:					
	Executive Level	314	437	440	440	0
	Senior Executive Service	3,880	4,371	4,405	4,512	107
	General Schedule	172,496	196,110	196,205	207,292	11,087
	Wage Board	248	251	283	283	0
	Patent Appeals Examiners (P.L. 92-593)	4,403	5,179	5,219	5,219	0
	Trademark Appeals Examiners (P.L. 98-622)	704	911	910	915	0
	Total, Full-Time Permanent Positions	182,023	206,268	207,440	218,634	11,194
11.3	Positions Other Than Full-Time Permanent:					
	General Schedule	3,487	3,656	3,698	3,698	0
	Wage Board	47	48	50	50	0
	Intermittent	21	42	42	42	0
	Total, Positions Other Than FT Permanent	3,555	3,746	3,790	3,790	0
11.5	Other Personnel Compensation:					
	Overtime	6,216	10,095	10,129	11,996	1,867
	Night Differential - Premium Pay	135	203	203	314	111
	Awards	5,985	6,671	6,671	9,326	2,655
	Total, Other Personnel Compensation	12,336	16,969	17,003	21,636	4,633
11.9	Total Personnel Compensation	197,913	226,983	228,233	244,060	15,827

Exhibit 17

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
12.0	Civilian Personnel Benefits:					
	Civil Service Retirement	7,094	6,887	6,609	6,609	0
	Federal Employee Retirement System (FERS)	10,882	13,624	14,826	16,270	1,444
	Thrift Plan Contributions	2,262	2,667	2,873	3,097	224
	Federal Insurance Contributions Act (FICA)	6,587	6,763	7,827	8,521	694
	Medicare	2,867	3,120	3,212	3,374	162
	Health Insurance	6,933	11,065	12,050	12,619	569
	Life Insurance	386	404	423	446	23
	Employees Compensation Fund	326	328	374	374	0
	Total, Civilian Personnel Benefits	38,126	44,878	48,183	51,300	3,118
13.0	Benefits for Former Personnel	102	120	120	140	20
21.0	Travel and Transportation of Persons:					
	Transportation - Domestic	118	184	180	262	82
	Transportation - International	136	186	156	171	15
	Local Transportation	6	12	12	12	0
	Per Diem Allowances	261	333	328	328	0
	Rental Car Expenses	14	17	17	17	0
	Privately-Owned Automobiles	5	8	8	5	0
	Rental of GSA Vehicles	43	46	47	47	0
	Total, Travel and Transportation of Persons	581	784	746	842	97
22.0	Transportation of Things:					
	Freight-Out	0	23	23	23	0
	Freight-In	18	27	27	27	0
	Parcel Post	1	855	841	1,179	338
	Other	96	126	126	126	0
	Total, Transportation of Things	115	1,031	1,017	1,355	338

Exhibit 17

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
23.1	Rental Payments to GSA	38,804	45,111	43,630	44,687	1,057
23.2	Rental Payments to Others	278	174	176	187	11
23.3	Communications, Utilities, and Misc. Charges:					
	Rental of ADP Equipment	1,282	2,322	2,322	2,316	(7)
	Rental of Office Copying Equipment	648	804	804	841	37
	Other Equipment Rental	82	433	433	478	45
	Federal Telecommunications Systems	487	1,037	1,037	1,075	38
	Other Telecommunications Systems	3,545	4,580	3,871	4,091	220
	Postal Services by USPS	1,384	2,709	2,596	2,656	60
	Utilities Services	341	940	940	984	44
	Total, Comm, Utilities, and Misc. Charges	7,728	12,828	12,002	12,439	437
24.0	Printing and Reproduction:					
	Patent Printing	28,563	27,558	30,043	32,661	2,618
	Trademark Printing	1,563	1,606	1,653	1,653	0
	Administrative Printing	190	331	334	371	37
	Publications	220	250	250	249	(1)
	Public Use Forms	3	50	50	116	66
	Envelopes	2	50	50	53	3
	Internal Use Forms	193	384	396	452	56
	Other Printing	820	2,103	786	815	29
	Working Capital Fund	0	0	0	0	0
	Total, Printing and Reproduction	31,544	32,329	33,562	36,370	2,808

Exhibit 17

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title:	1992 Actual	1993 Estimate	1994 Base	1994 Estimate	1994 Increase (Decrease)
25.1	Consulting Services	172	200	200	220	20
25.2	Other Services:					
	Training	2,406	2,765	2,858	3,703	845
	Maintenance of Equipment	3,643	3,799	3,803	4,330	527
	GSA Alterations and Repairs	396	1,208	1,208	1,464	256
	ADP Services	4,809	6,028	6,186	6,709	523
	Telecommunications Services	837	1,847	1,847	1,847	0
	Guard Services	651	633	668	668	0
	Other Contracts	77,034	83,764	77,609	85,365	7,756
	Working Capital Fund	3,271	4,722	4,968	4,968	0
	Total, Other Services	92,947	103,764	99,147	109,054	9,907
26.0	Supplies and Materials:					
	Office Supplies	444	716	716	655	(61)
	ADP Supplies	1,206	1,673	1,673	2,276	603
	Microfilm Supplies	612	600	600	600	0
	Other Supplies	1,452	1,664	1,591	1,712	121
	Books and Periodicals	1,268	1,584	1,658	1,938	280
	Paper for Office Copying Equipment	223	403	403	406	3
	Total, Supplies and Materials	5,205	6,640	6,641	7,587	946
31.0	Equipment:					
	Office Machines and Equipment	166	270	270	277	7
	ADP Hardware	7,307	7,567	7,557	6,974	(583)
	ADP Software	443	677	677	677	0
	Office Furniture	2,174	2,497	2,487	1,916	(571)
	Other Furniture and Equipment	704	1,085	1,113	1,299	186
	Total, Equipment	10,794	12,096	12,124	11,143	(981)
42.0	Insurance Claims and Indemnities	284	300	300	300	0
	Total Obligations	422,391	487,194	485,090	518,692	33,602

Exhibit 33

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Salaries and Expenses
APPROPRIATION LANGUAGE AND CODE CITATIONS

1. For necessary expenses of the Patent and Trademark Office provided for by law, including the defense of suits instituted against the Commissioner of Patents and Trademarks;

    15 U.S.C. 1051-1127
    15 U.S.C. 1511
    35 U.S.C. 1-4, 6-42, 141-145, 376
    44 U.S.C. 1337-1338

    15 U.S.C. 1051-1127 contains provisions of the Trademark Act of 1946 that govern the administration of the trademark registration system of the Patent and Trademark Office.

    15 U.S.C. 1511 states that the Patent and Trademark Office is under the jurisdiction and supervision of the Department of Commerce.

    35 U.S.C. 1-4, 6-42, 141-145 contains basic authorities for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments. Revenues from fees are available to the Commissioner to carry out, to the extent provided for in appropriation acts, the activities of the Office. Since fiscal year 1983, all fees are available to the Patent and Trademark Office.

    35 U.S.C. 376 authorizes the Patent and Trademark Office to charge international fees for activities undertaken pursuant to the patent Cooperation Treaty.

    44 U.S.C. 1337-1338 contains authority to print patents, trademarks, and other matter relating to the business of the Office.

2. $103,000,000 to be derived from deposits in the Patent and Trademark Office Fee Surcharge Fund as authorized by law: Provided , That the amounts made available under the Fund shall not exceed amounts deposited; and such fees as shall be collected pursuant to 15 U.S.C. 1113 and 35 U.S.C. 41 and 376 ,

Exhibit 33

15 U.S.C. 1113(a) provides that:: "The Commissioner of Patents and Trademarks will establish fees...for the registration of a trademark or other mark and for all other services performed by and materials furnished the Patent and Trademark Office related to trademarks and other marks."

35 U.S.C. 41(a) provides that: "The Commissioner of Patent and Trademarks will establish fees for the processing of an application for a patent,...for maintaining a patent in force, and for providing all other services and materials related to patents."

35 U.S.C. 42(c) provides that: "Revenues from fees will be available to the Commissioner of Patents and Trademarks to carry out, to the extent provided for in appropriation Acts, the activities of the Patent and Trademark Office" and that "fees available to the Commissioner under Section 31 (15 U.S.C. 1113(a) of the Trademark Act of 1946 shall be used exclusively for the processing of trademark registrations and other services and materials related to trademarks."

35 U.S.C. 376 authorizes the payment to the Patent and Trademark Office of international fees collected pursuant to the Patent Cooperation Treaty.

3. to remain available until expended.

Public Law No. 102-204, section 2 provides that appropriations authorized under this Act and such fees as may be collected can be carried over and remain available until expended.

Exhibit 34

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
Salaries and Expenses
CONSULTING AND RELATED EXPENSES
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$0	$0	$0
Management and professional services	$172	$200	$220
Special studies and analyses	$0	$0	$0
Management and Support services for research and development	$0	$0	$0
TOTAL	$172	$200	$220

Funding for consulting and related services in 1993 and 1994 will provide support to the PTO in its efforts to reduce pendency times, to improve the quality of its products and services, to automate office processes, and to protect and promote U.S. intellectual property rights abroad.

Exhibit 35

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
Salaries and Expenses
PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$23	$25	$24	$24
Pamphlets	$39	$35	$46	$46
Audiovisuals	$6	$11	$8	$8
TOTAL	$68	$71	$78	$78

Technical literature documents in the form of periodicals and pamphlets are essential in the patent and trademark examination process. The printing costs are reflected above. The requirement for technical documents is directly proportional to the workload and the resultant production in the patent and trademark examination activities. The use of audiovisuals is primarily for PTO's National Inventors Day program.

Exhibit 36

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
Salaries and Expenses
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Salary	$101,553	$104,879	$104,935
Average GS/GM Grade	9.86	9.78	9.72
Average GS/GM Salary	$38,366	$41,014	$40,997

Mr. MOLLOHAN. Testifying on behalf of the Patent and Trademark Office today is Michael K. Kirk, the Acting Commissioner of Patents and Trademarks.

Mr. Kirk, since this is your first time before the subcommittee, we will insert your biographical sketch into the record. We welcome you today. I want you to know your written statement will be made a part of the record and you may proceed as you will.

Mr. KIRK. Thank you, Mr. Mollohan.

[The biographical sketch of Mr. Kirk follows:]

BIOGRAPHY OF MICHAEL K. KIRK

PROFESSIONAL EXPERIENCE

Department of Commerce—Acting Assistant Secretary and Acting Commissioner of Patents and Trademarks, as of February 15, 1993; Assistant Commissioner for External Affairs, U.S. Patent and Trademark Office, 1982–present; Chief Negotiator, Trade Related Intellectual Property Rights, GATT, 1991–1992; Deputy Negotiator, 1987–1991; Head or member of U.S. delegations to numerous WIPO, UNCTAD and OECD meetings, and bilateral negotiations on intellectual property and trade matters, 1972–present; Director, Office of Legislation and International Affairs, 1972–1982; Special Assistant to the Commissioner of Patents, 1970–1972; Legislative Specialist, 1967–1970; Patent Examiner, 1962–1965.

National Aeronautics and Space Administration Patent Attorney, 1965–1967.

U.S. Army—Patent Technician/Unit Commander, 1960–1962.

Southern Bell Telephone Company—Engineer, 1959–1960.

ACADEMIC

The Citadel, Bachelor of Science in Electrical Engineering, 1959 Tau Beta Pi Engineering Honor Society; Georgetown University Law Center, Juris Doctor, 1965 Member, Georgetown Law Review; Indiana University, Master of Public Administration, 1969.

PROFESSIONAL HONORS

Jefferson Medal for Contributions to American IP Law, (May 8) 1992.
Gold Medal Award, Department of Commerce, 1983.
Presidential Rank of Meritorious Executive, 1981.
Senior Executive Service Bonus Award, 1980, 82, 84, 85, 86, 88, 90, 91.
Silver Medal Award, Department of Commerce, 1975, 1987.
Sustained Superior Performance Award, 1979.
Special Achievement Awards, 1974–77.
National Institute of Public Affairs Career Education Award, 1968.

ORGANIZATIONS AND ACTIVITIES

Member: Virginia Bar; American Bar Association, Section of Patent, Trademark, and Copyright Law (Chairman of International Patent Treaty and Laws Committee, 1982–84; Section Council 1984–87; Chairman of Special Committee on PTO Liaison 1988–89; Nominating Committee, 1992–93); American Intellectual Property Law Association; Federal Bar Association; Government Patent Lawyers Association; Licensing Executives Society; International Patent and Trademark Association (Executive Committee, 1988–89); Registered Patent Attorney, admitted to practice before the Court of Appeals for the Federal Circuit.

Lecturer: The John Marshall Conference on Intellectual Property, the 21st Annual Southwestern Legal Foundation Proceedings, and the Albany Law School/Rensselaer Polytechnic Institute Center for Industrial Innovation Conference.

PERSONAL

Born: November 13, 1937, Jacksonville, Florida. Married to the former Mary Catherine Everett. Two children: Tracy and David.

Telephone: Office (703) 305–9300.

GENERAL STATEMENT

Mr. MOLLOHAN. You might introduce the gentleman with you.

Mr. KIRK. I will do that. With me is James Lynch. He is the budget officer for the Patent and Trademark Office.

We appreciate the opportunity to be here this morning to present the President's request for appropriations for the Patent and Trademark Office. I will abbreviate somewhat my prepared text since you are going to put that into the record as you indicated.

The Patent and Trademark Office budget for fiscal year 1994 is, as you indicated, $518,692,000, all of which is funded by user fees.

There are two significant spending reductions which have been incorporated into this proposed budget. First, pursuant to President Clinton's directive, we will save almost $15,000,000 in salary and administrative expenses. Second, we have saved about $6.8 million in space costs through a reappraisal of the commercial value of our leases. I am delighted to report these actions, together with a projected growth in fiscal year 1994 revenues, will enable us to carry out our program with no increase in patent fees.

The PTO's budget initiatives for fiscal year 1994 total $45,020,000 over the fiscal year 1993 enacted level, an increase of less than 10 percent. About 89 percent of this amount is funded through higher workload revenues and the remainder will be financed through a one-time increase from $210 to $245 for the trademark filing fee. We will be forwarding authorization legislation to the Congress next month to adjust this fee effective October 1, 1993.

Of the $45 million increase, a portion will be used to fund adjustments to the fiscal year 1993 base program. More specifically, $12.3 million is needed to restore the fiscal year 1993 funding reductions to the fee surcharge fund; $4.9 million is needed to fund the full year cost in fiscal year 1994 of those employees who were hired in fiscal year 1993; and $6.9 million is needed to compensate for inflation.

These increases will be offset by savings of $6 million due to administrative and personnel reductions, and the reduction that I mentioned earlier of $6.8 million to the rates paid for leased space. Thus, our adjustments to base request total $11.4 million.

Our proposed budget changes of $33.6 million to the adjusted fiscal year 1994 base consist of workload, automation, and quality enhancements. The details of our budget request will be forwarded to the Committee shortly.

Our budget proposal has many benefits for large industry, as well as for independent inventors, small businesses, and universities. First, we will maintain average pendency times of 18 months for patents and 13 months for trademarks.

Second, we will enhance the quality of our products and the efficiency of the services we provide through new process reengineering techniques such as those now being used to design and develop the Patent Application Management component of our Automated Patent System.

Thirdly, we will promote effective public access on a fee-for-service basis to our vast storehouse of scientific, technical, and business information.

The PTO is not supported by taxpayer funds, as you know. We are supported entirely by fees that we charge our users, and we believe that the fees we collect should all be invested in providing the best possible service to our users.

In November of 1990, a surcharge was imposed on the patent fees paid by our users. The funds raised by the surcharge, $495 million for the period 1991 through 1995, replaced taxpayer revenues and contributed to the reduction of the deficit.

While all of us understand the problems caused by the Federal deficit, users of the patent system have contributed significantly to its reduction. Notwithstanding this contribution in fiscal year 1992 and fiscal year 1993, Congress did not appropriate the full amount of revenues which PTO users paid for services. More than $20 million derived from the statutory patent fee surcharge have not been appropriated to date. Many of our constituents refer to this as an "unfair tax on innovation."

I urge the Subcommittee to appropriate the full amount, $103 million, which users will pay in their fees to the PTO under the patent surcharge.

Mr. Chairman, this concludes my statement, I will be glad to answer any questions.

Mr. MOLLOHAN. Thank you, Mr. Kirk.

[The prepared statement of Mr. Kirk follows:]

STATEMENT BY THE ACTING ASSISTANT SECRETARY OF COMMERCE AND ACTING COMMISSIONER OF PATENTS AND TRADEMARKS
MICHAEL K. KIRK
BEFORE THE
SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, AND JUDICIARY
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

March 31, 1993

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to present the President's request for appropriations for the Patent and Trademark Office for fiscal year 1994. With me is the PTO's Budget Officer, James Lynch.

FY 1994 REQUEST LEVEL

The Patent and Trademark Office's budget request for FY 1994 is for $518,692,000, all of which is funded by user fees.

There are two significant spending reductions which have been incorporated in this proposed budget. First, pursuant to President Clinton's directive, we have cut almost $15,000,000 in salary and administrative expenses. Second, we have saved about $6,800,000 in space costs through a reappraisal of the commercial value of our leases. I am delighted to report that these actions, together with a projected growth in FY 1994 revenues, will enable us to carry out the FY 1994 program with no increase in patent fees.

The PTO's budget initiatives for FY 1994 total $45,020,000 over the FY 1993 level, an increase of less than 10%. About 89% of this increase is funded through increased fee collections resulting from increased workload and the remainder will be financed through a one-time increase in the trademark filing fee - from $210 to $245. We will be forwarding authorization legislation to the Congress next month to adjust this fee effective October 1, 1993.

Of the $45,020,000 increase, a portion will be used to fund adjustments to the FY 1993 base program. More specifically, $12,328,000 is needed to restore funding reductions in the FY 1993 enacted budget; $4,945,000 and 87 FTE are needed to fund the full-year cost in FY 1994 of those employees who were hired in FY 1993; and $6,873,000 is needed to compensate for inflation. These increases will be offset by savings of $5,969,000 due to administrative and personnel reductions and $6,759,000 in rates paid for leased space. Thus, our adjustment-to-base request totals $11,418,000.

Our proposed budget changes of $33,602,000 to the adjusted FY 1994 base consist of the following:

- $20,301,000 and 161 positions for our patent examination, clerical processing and printing operations -- these resources will enable us to keep pace with a projected 4% increase in workload;

- a net increase of $4,926,000 for the Automated Patent System, which amount will support the development of an automated patent application filing system;

- $3,024,000 for contractor support of our automated management and administrative systems, including our inventory control and personal computer network;

- $1,705,000 for our trademark examination operation -- these resources will enable us to keep pace with a projected 6% increase in workload;

- $1,255,000 and 25 positions for our pre-examination and Patent Cooperation Treaty processing areas;

- a decrease of $1,645,000 associated with the planned completion of the automated assignment system;

- an increase of $364,000 and three positions for improved maintenance of the Public Search Room's files, replacement of farecard equipment and the provision of certified copies of our records;

- $161,000 and nine positions to enable our Publications staff to process about 5,300 additional patents and trademarks through the post-examination segment of our production pipeline;

- $1,658,000 and 22 positions to improve our ability to search and examine patent applications, especially those in the field of biotechnology, reclassify U.S. patents, process new foreign patents and expand our use of commercial databases; and

- a net increase of $1,853,000 and 11 positions for maintenance of the roster of patent attorneys and agents, improved recruitment and training of employees, software enhancements to our automated financial management systems and, finally, the acquisition of 35,000 square feet of space to house our staff and accommodate our ever-expanding paper storage requirements.

Our budget proposal has many benefits for industry, independent inventors, small businesses and research groups:

(1) we will maintain our average pendency times of eighteen months for patents and thirteen months for trademarks;

(2) we will enhance the quality of our products and the efficiency of the services we provide through new process reengineering techniques, such as those now being used to design and develop the Patent Application Management component of our Automated Patent System; and

(3) we will promote effective public access on a fee-for-service basis to our vast storehouse of scientific, technical and business information.

Because the Patent and Trademark Office is not supported by taxpayer funds, we believe that the user fee revenues which we collect should be invested in providing the best possible service to our customers. In FY 1992 and FY 1993, the Congress did not appropriate the full amount of revenues which Patent and Trademark Office users paid for services. More than $20,000,000 derived from a statutory patent fee surcharge imposed on November 5, 1990, have not been appropriated to date. Many of our constituents call this an unfair "tax on innovation." While all of us understand the problems caused by the growing Federal deficit, we believe it is important to recognize that the elimination of all taxpayer support for the PTO's program represents a $495,000,000 offset to the deficit for the period 1991-1995. Many of our constituents call this an unfair "tax on innovation." I urge the Subcommittee to appropriate the full amount -- $103,000,000 -- which users will pay in their fees to the Patent and Trademark Office under the patent surcharge for specific patent services.

Mr. Chairman, this concludes my statement. I will be glad to answer your questions.

TRADEMARK FEE INCREASE

Mr. **Mollohan.** Your prepared statement notes that fiscal year 1994 budget initiatives total $45,020,000 over the fiscal year 1993 enacted level. You state almost 90 percent of this increase is funded through higher workload revenues, with the remainder being funded through a proposed one-time increase in the trademark filing fee.

What is this one-time increase of $35 for trademark filing fees based on and why are you requesting the increase for only one year?

Mr. **Kirk.** To go back to what the problems are, we were, up until 1990, funded with revenues from taxpayer dollars. Certain overhead costs of the agency were funded through these amounts. When we were taken off taxpayer dollars, the trademark operations then had to absorb a greater share of these overhead revenues, which they were not having to share before.

Secondly, they moved into new quarters. They were extremely cramped and they moved into new quarters, and the rental rates for the new quarters was some $3.4 million, if I recall correctly, higher than their previous rental rates; annually. This was necessary because there was terrible crowding and the trademark operation was understaffed. They had to move and get more adequate space.

And, thirdly, we had simply an increase in the workload cost. We had a big increase in filing due to the intent to use legislation, and the fact of the matter is the big increase in filings is not totally offset by the fees coming in for the trademark application. The trademark application filing fee does not recover 100 percent of the cost of examining and registering the mark.

The way the trademark fees are designed, there are not only filing fees but also renewal fees and other processing fees which in the aggregate are intended to collect the total budget. So when we had a big surge in applications, we had a shortfall.

When we request this increase, it is to collect approximately $4.8 million in additional trademark revenues in 1994 and it is a one-time increase in the sense that we are only asking to go beyond the Consumer Price Index one time, which is the limiter for us in terms of raising our fees. We are asking to go beyond that limiter one time. But, the fee would then be a permanent fee which would then be increased in outyears by the Consumer Price Index inflater, and we think this will put us in a situation where we can then maintain the services for our trademark applicants.

PTO AUTOMATION

Mr. **Mollohan.** Will you discuss your efforts to automate and the status of where you are with automation?

Mr. **Kirk.** Well, I can tell you this; that we have, as you know, as you are well aware probably better than I, we have come a long way since we began this program in 1983. We have automated our trademark search files. We deployed this initially to the examiners back in the mid-1980's and made it required use for them in the late 1980's, so that all of the applications are examined against this database of trademark registrations. They have been doing that now for a number of years.

On the patent side, we have created the messenger search system, the text search, and that has been available to all examiners since 1987. This is much like the Lexis database used by lawyers, except that it covers patents issued beginning in 1971. To date, 1.4 million patents can be text searched by the Patent Examining Corps, and the public has access to this same database now in our Public Search Room. There are eight terminals there now. We have also extended it to 14 of our patent and trademark depository libraries, so that the public around the country has access to search these 1.4 million patents with text search.

In addition to that, we have image search, which is the images of interest to our examiners. Four of our examining groups will have this image search capability in place by the end of this fiscal year. In July of this year, we will extend the image search to what we call a public casino. It will be a large room with 10 workstations initially so that the public will be able to have access to the same image search. That will cover all of the patents in all technologies in this public search facility issued from 1971 to date, across all fields of technology. That is where we stand at the moment, and we are moving ahead now.

With the funding provided in this request, we will add an increase of $5 million for our Patent Application Management system, which is the system that will allow us to receive applications electronically, process them through the office electronically, and to use the output of that to print patents, PTO will have a number of savings associated with it when fully implemented.

First of all, it will be a significant reduction in staff, because transferring the paper associated with 189,000 patent applications and keeping track of that through the office from the day it comes in, to the day it goes out, is monumental. All of the staff associated with this can be reduced with the patent application management system.

The printing cost, we now pay about $20 million a year just for the key stroking to put patents into the database. With the new system, this capability will be in our database so we can avoid these sorts of costs.

For the Patent Application Management system, which we hope will begin receiving applications in 1995 and will begin printing from that in 1997, we are making aggressive strides to bring that into place now. We are making progress. It is a big project and we are doing the best we can to move it forward.

AUTOMATION INITIATIVES

Mr. MOLLOHAN. Is the $5 million your total request of the Committee for upgrading equipment?

Mr. KIRK. The $5 million is for PAM.

Mr. MOLLOHAN. Patent Application Management.

Mr. KIRK. Patent Application Management, that is correct. That will be the big chunk.

We also are asking for an additional $3 million to upgrade what we call our Patent Application Location and Monitoring system, PALM, plus providing some maintenance for the network that we have in the office that our examiners use with their personal computers. The $3 million will go to the combination of that maintenance plus what we call the PALM System, our administrative system for keeping track of patent applications.

Mr. MOLLOHAN. So what is the total?

Mr. KIRK. About $8 million totally with PAM and with the PALM increases for 1994.

Mr. MOLLOHAN. And when you project that out to the point where you have completed these upgrades, how much money are you anticipating requesting?

Mr. KIRK. Are you talking about the total system?

Mr. MOLLOHAN. Yes, I am.

Mr. KIRK. If we are talking the total investment, I believe we are in the range of $1,037,000,000. That is over the full implementation of 20 years. That is the entire APS. So that is text search, image search, printing patents off of the database, the patent application management system, as well as improvements in our classification services. So that is the entire package over the 20-year period.

Mr. MOLLOHAN. And that 20-year period began in what year?

Mr. KIRK. 1983.

Mr. MOLLOHAN. 1983.

Mr. KIRK. In constant 1992 dollars.

Mr. MOLLOHAN. Are these different contractors, different manufacturing? Are these companies with the same system? What different systems are you employing here?

Mr. KIRK. Well, I would——

Mr. MOLLOHAN. You said it is a Lexis style?

Mr. KIRK. Lexis style in the sense that, for example, referring now to our text search system, we have captured the full text, really it is a by-product of our printing process which we began back in 1971. We have captured the full text of all patents that have been issued since 1971, beginning January 1, 1971. We have now put these into the database so that an examiner or a member of the public can come in and say, I would like to see all of the patents that deal with Doppler radar. The system will then come back and tell you that it has 3,212 patents that have the term Doppler radar. You say that is too many to review. You add in a few more words, Doppler radar associated with aircraft, landing fields, night flying, whatever you wish to put in, and each time you do that, of course, you cut down the number of patents that contain all of these terms.

So eventually you will get down to a searchable number and at that point you can then call up the patents to actually review them or go to the paper files and pull them out. It will give you the numbers of those patents and you can review to determine whether they are relevant to the invention that you are searching and the patent application before you.

Mr. MOLLOHAN. What I am asking is who is manufacturing these systems? What companies are you dealing with?

Mr. KIRK. Well, the prime contractor is referred to as the Planning Research Corporation. They are in charge of the entire system. We work with them to bring the system into place.

PATENT APPLICATION MANAGEMENT SYSTEM

Mr. MOLLOHAN. Let me go through this series of questions on the management system. You are requesting an increase of $7,950,000 to continue the development of the PAM system to automate the patent application process. How much is in the base for this program?

Mr. KIRK. Mr. Lynch informs me that $1.14 million is in the base for PAM. Let me add that I may have confused you, Mr. Mollohan, because it is $4.9 million that we are seeking as an increase in 1994 for PAM. So, it would be $1.4 plus the $4.9 for PAM. The other $3 million is for the Patent Application Location and Monitoring system.

Mr. MOLLOHAN. What is the total anticipated cost for the system?

Mr. KIRK. For the entire APS?

Mr. MOLLOHAN. For the entire PAM system.

Mr. KIRK. About $60 million over its life.

Mr. MOLLOHAN. Assuming you receive your full funding request, when will this system be completed?

Mr. KIRK. We would expect to receive applications electronically in 1995 and to begin printing patents out of the system in 1997. Those are our current expectations.

Mr. MOLLOHAN. Now, Planning Research Corporation is managing the whole system's upgrade; is that correct?

Mr. KIRK. They have been managing the patent search, the text search and the image search development. The PAM system will be a new contractor and we will be letting that contract, I believe, next year, in 1994. So, we are doing the preliminary work now and we will contract that out in 1994.

Mr. MOLLOHAN. Okay. When would you expect to release the RFP for that?

Mr. KIRK. This is Boyd Alexander, the Deputy Assistant Commissioner for Information Systems.

Mr. ALEXANDER. We would expect to release that contract as an RFP in July of this year.

Mr. MOLLOHAN. When would you expect to execute a contract?

Mr. ALEXANDER. It takes about 12 to 18 months. It depends on the procurement process we have to go through with the government. It is about that time frame before we would actually get that computer.

Mr. MOLLOHAN. You are not talking about letting a contract until perhaps the beginning of the fiscal year in 1995?

Mr. ALEXANDER. Pardon? I am sorry, July of 1994 is the award. We would release it this year, in July of this year.

Mr. MOLLOHAN. You said it might take 18 months?

Mr. ALEXANDER. Twelve to 18, but we are planning now on the 12-month activity.

Mr. MOLLOHAN. That is a good recovery.

Mr. ALEXANDER. We have done some preplanning and have talked with GSA and briefed people and we expected that would be the case, because everybody sees the benefits from this and they believe it is worth trying to bring in the benefits as soon as we possibly can.

Mr. Mollohan. How much of the cost of the system are you requesting for the 1994 appropriation?

Mr. Kirk. It is $6.4 million all together.

Mr. Mollohan. I know the amount. Is that the total cost of the system? Would you expect to be able to expend all of that, assuming you were able to let the contract in 12 months?

Mr. Alexander. Yes.

Mr. Mollohan. You are shaking your head, Mr. Kirk.

Mr. Kirk. I am saying, yes, we would certainly plan to. I mean, the total cost, as I said before, will be $60 million, and we certainly hope that we would be able to expend that, because that would mean we would adhere to our schedule, which we very much want to do.

PAM SAVINGS

Mr. Mollohan. Last year, former Commissioner Manbeck told us you were looking at a potential savings of 60,000,000 to 70,000,000 once the PAM system is up and running. Do you still anticipate that level of savings?

Mr. Kirk. Yes, we do, Mr. Mollohan. In preparing for this testimony, I was informed that the savings over a 20-year life cycle of the Patent Application Management system will be $711 million; that is the current estimate. So you might say that once it is operational, we could be saving perhaps as much as $35 million annually.

Mr. Mollohan. Is most of that savings coming from personnel reductions?

Mr. Kirk. Some of it comes from personnel reductions, and some of it will come from the savings in the keyboarding contract, which is over $20 million a year.

Mr. Mollohan. Who holds that contract for the keyboarding?

Mr. Kirk. ICC, International Computaprint Corporation.

Mr. Mollohan. I see. How much of that savings would be from reduction of personnel?

Mr. Alexander. Not quite half.

Mr. Kirk. I am advised not quite half.

Mr. Mollohan. Approximately half in personnel reductions and half from——

Mr. Kirk. Contractor cost.

WORKING CAPITAL FUND

Mr. Mollohan. Commissioner Manbeck also discussed last year the possibility of creating a working capital fund to pay for this automated system. In submitting a request for such a fund as part of your fiscal year 1994 budget request, are you asking for the establishment of a working capital fund in this budget.

Mr. Kirk. No, we are not. We took a closer look at that and determined that was not feasible nor was it necessary, in part because of our ability to begin the funding of PAM with the space cost reductions, which we got and which we applied to PAM beginning already in this year.

Mr. Mollohan. Mr. Rogers?

OMB REQUEST

Mr. **Rogers**. Thank you, Mr. Chairman.

How much did you request of OMB?

Mr. **Kirk**. We requested $540 million.

Mr. **Rogers**. How are you going to manage with just 518?

Mr. **Kirk**. Well, the difference was through three things, basically: The personnel savings that we will achieve due to the President's reduction in personnel; the pay raise freeze that will be in effect in 1994; and, thanks to this Committee, the reduction in our space cost in Crystal City. Those three combined allow us to live with our $518 million request.

Mr. **Rogers**. Well, that is still a $45 million increase over the current year.

Mr. **Kirk**. Yes, sir.

Mr. **Rogers**. So, actually, your request is for the $415 million plus authority to spend $130 million in fee surcharges?

Mr. **Kirk**. Yes, sir.

Mr. **Rogers**. Now, how much of an increase in fee surcharges over the current year is that?

Mr. **Kirk**. I am not quite sure that I fully understand your question, sir.

FEE INCREASE

Mr. **Rogers**. Well, are you asking authority to charge more fees?

Mr. **Kirk**. We are not asking for any increase in patent fees for fiscal year 1994.

Mr. **Rogers**. Any other fees?

Mr. **Kirk**. We are asking for a one-time adjustment past the Consumer Price Index of the trademark fee. The filing fee would go from 210 to 245 to offset some added cost in our trademark operation. But in the patent area, due to the reductions we see coming, we will be able to absorb the inflation and other increases so that we will not need to increase patent fees to our users for fiscal year 1994.

Mr. **Rogers**. Increasing the trademark fees will require legislation, will it not?

Mr. **Kirk**. Yes, sir.

AUTHORIZING LEGISLATION

Mr. **Rogers**. You are proposing authorizing legislation, correct?

Mr. **Kirk**. That is correct. We have prepared an authorizing bill that is currently going through the clearance process. We would expect it would be up here early next month. That legislation does specifically provide for this one-time adjustment to the trademark filing fee, and then, after that, we would continue as we have for only adjustments up to the CPI, if in fact that is necessary to maintain our operations.

COST OF AUTOMATION

Mr. **Rogers**. What will be the total cost of PAM automation when completed?

Mr. **Kirk**. $60 million.

Mr. **Rogers**. Over how many years?

Mr. **Kirk**. That would be through its inception, through 1998.

Mr. **Rogers**. Last year, we were told it would cost 70 to 80 million. Can you explain why that is now reduced?

Mr. **Kirk**. I cannot, sir. I would certainly be happy to look into that and see if I can provide that answer to you in writing.

[The information follows:]

We expect the initial deployment of PAM which will permit patent applications to be filed in electronic form and patents to be printed the resulting data base will be completed in 1997 at a cost of $57.5 million.

Subsequent integration with APS will require license fees, hardware and software enhancements and Mixed Media development totals an additional $18.4 million for the fiscal years 1990 and 2002. Therefore, the $80 million figures goes beyond initial deployment and covers the additional period 1998 to 2002.

PAM costs estimates—dollars in thousands

Fiscal year:	*Costs*
1992	$1,766
1993	4,141
1994	6,739
1995	16,100
1996	15,614
1997	13,163
Subtotal	57,523
1998	4,657
1999	3,921
2000	6,606
2001	3,921
2002	3,921
Subtotal	23,026
Total	80,549

Mr. **Rogers**. And as I think the Chairman asked you, you are asking $4.9 million next year to develop that system?

Mr. **Kirk**. An increase, yes, sir.

Mr. **Rogers**. An increase.

Mr. **Rogers**. I think that is all. Thank you, Mr. Chairman.

Mr. **Mollohan**. Mr. Moran.

TRILATERAL DATA AGREEMENT

Mr. **Moran**. Thank you, Chairman Mollohan.

You have a trilateral data agreement with Japan and Europe, but you charge Japan and Europe twice the fee you charge the general public, and they, in turn, charge more as well. As a result, partly as a result, some of our private firms are disadvantaged because of this higher fee level that is set.

The difference cannot be accounted for by additional courier service costs. What is the rationale for charging twice the fee that you charge the general public?

Mr. **Kirk**. I am not sure, Congressman Moran, I am understanding your question fully. Are we talking about the filing fee; the cost to obtain patents?

Mr. **Moran**. That is right. Well, isn't that the principal fee that you have?

Mr. **Kirk**. Yes, it is.

Mr. MORAN. It is a filing fee we are talking about. You have a trilateral data agreement between Europe, Japan and the United States which the Congress wanted, but the filing fees are twice what you charge the general public.

Mr. KIRK. Well, let me give part of an answer which may not be responsive and then you can correct me.

The filing fee that we charge applicants, U.S. and foreign alike, is identical. The only difference we make is whether or not the applicant is a large entity or a small entity. If it is a small entity, we give them a 50 percent fee reduction on the filing issue and maintenance fees.

Now, as far as charging foreign applicants and U.S. applicants, U.S. residents and foreign residents, who seek patents in the United States, as far as charging them the same fee, this is an obligation we have under the Paris Convention which requires that you not discriminate; you must treat foreign nationals the same as you treat U.S. nationals.

Mr. MORAN. Is there a different data fee that you charge?

Mr. KIRK. Mr. Huther has been working with the trilateral.

Mr. HUTHER. If I understand your question, Congressman, it deals with what do we charge the Europeans and the Japanese to acquire our databases and what do we charge the public for acquiring exactly the same database. There are two different prices that are involved in that.

In terms of the formula that we use to calculate our costs for supplying our data to the Europeans and Japanese, it was an agreed upon formula the three offices negotiated. Under that price, I believe we charge $14.53 per reel of magnetic tape of our data. It was calculated in terms of the lowest possible cost base that we could establish, because the principal advantage of this is if we price our data at the lowest level, we would expect the Japanese and the Europeans to do exactly the same. This enabled us to save about $25 million in the acquisition of the Japanese and the European patent databases, some approximately 65 million pages of patent documentation.

The formula we used to calculate the price for charging an information industry host, or any other American citizen that would wish to buy our data, is in accordance with the standard user fee calculation base which includes other costs that the trilateral database cost does not.

For example, overhead charges, a part of my salary, would be attributed to the delivery of the data to the United States applicants and the information host whereas we agreed not to include overhead costs in the cost base for the Europeans and the Japanese.

If we had included it in ours, they would have included it in theirs. It would have increased the cost we would have had to pay to acquire the rights to the European and Japanese databases. So, we think this is the lowest cost approach to the patent user, who, of course, is the source of the revenue we have to buy these databases.

Mr. MORAN. So everyone is supportive? This is not a problem?

Mr. HUTHER. We have heard no complaints about this, Mr. Moran, since 1984 when the agreement was signed.

PTO LEASE COSTS

Mr. **Moran**. Thank you for clarifying that.

Now, let me get into another issue. You say you saved $6.8 million, a major part of your budget request, because you renegotiated leases with GSA.

Can you tell us what was your average square foot lease cost? Do you have those numbers?

Mr. **Kirk**. Average square footage was, in 1992 the actual was $26.53 per square foot.

Mr. **Kirk**. In 1993, the cost is planned to be $27.66.

Mr. **Moran**. Why does that save $7 million?

Mr. **Kirk**. Well, it goes back to the fact that GSA calculates what the market price should be for the space that we occupy, and that is what they charge us. It doesn't matter what they are actually paying, it is this overall formula for this area.

So they had intended to go, both in 1992 and 1993, to a much higher level, and it was with the effort and help of this subcommittee and the Senate Appropriations Committee that we got language in GSA's appropriation legislation that suggested that they would want to look at giving us something that was closer to the actual charge.

So, both in 1992 and in 1993, they have lowered what they would otherwise have planned to charge us. So, that is where the savings come from. Had it not been for that language and that help we would have been paying $6.8 million more annually this coming year.

Mr. **Moran**. Well, the market rates actually went down. My impression is that, to use a colloquial term, GSA is ripping off these agencies and not to mention the landlords.

Do you have the figures for what GSA was actually paying the landlord for the space you were paying $26 for?

Mr. **Kirk**. We can provide that for the record. We don't have it with us this morning.

Mr. **Moran**. Well, I would like that. I have some situations where GSA was charging the Navy $55 a square foot apparently for space they were actually paying $9 a square foot for, and this is not going to be as extreme a situation, but I really want to find those specific figures out. I would be very much interested in that.

Mr. **Kirk**. We will get those for you, Congressman Moran.

Mr. **Moran**. Thank you.

[The information follows:]

The PTO can only provide an estimate of the rent paid to the lessor (Charles E. Smith and Westfield Realty). This estimate is for the buildings that are delegated for management by the PTO. The PTO occupies 15 buildings in Crystal City. Delegated buildings comprise only 7 in Crystal City. The total square footage cost to the lessor is about $25.80 per square foot. However, the average square footage cost for the PTO is about $29.33 for delegated buildings. The estimated difference of $3.53 is 13.7% more than what GSA pays Charles E. Smith or Westfield Reality.

Building	Total square toot	Estimated total cost—	
		Lessor's	GSA's
Crystal Mall 1	157,989	$3,675,000	$4,903,276
Crystal Park 2	184,433	5,680.000	5,942,340

Building	Total square foot	Estimated total cost—	
		Lessor's	GSA's
Crystal Plaza 1	4,173	103,000	97,231
Crystal Plaza 2,3,4	524,586	12,967,000	14,311,516
South Tower	139,024	3,636,000	4,379,081
Total	1,010,205	26,061,000	29,633,444

Note.—Average Cost Per Square Foot. Lessor's Estimated Cost: $26,061,000/1,010,205=$25.80. GSA's Estimate Cost: $29,633,444/1,010,205=$29.33. Difference: $3.53. PTO pays GSA 13.7% more than what GSA pays the lessors.

GSA LEASES

Mr. Moran. Would you find it more-I won't ask you if you find it more appropriate. Would you find it easier to deal with the landlord that provides the space directly so that you could negotiate in terms of the physical upkeep of the property and so on, than having to work through GSA? Can you say that for the record?

Mr. Kirk. Well, I think, Congressman Moran, you know what the answer is on that, so I think I will leave it at that.

Mr. Moran. All right, we will have to deal with GSA directly. I am sure GSA doesn't have any representative here sitting back there. They sit back and collect their money.

Mr. Skaggs. Different subcommittee.

Mr. Moran. Yes. How long are your leases on this property?

Mr. Kirk. Our leases will expire in the 1996–1997 time frame.

Mr. Moran. Have you made any plans as to what it is you are going to do at that point?

Mr. Kirk. We have been working with GSA to develop a prospectus. That prospectus is currently pending approval at OMB. We had been advised earlier it should be coming out sometime this spring, and we would start the process for soliciting proposals for new space for the Patent and Trademark Office.

We have earmarked the Northern Virginia area. We have specified certain criteria that we need in terms of public transportation for our employees, access to airports and the like, for our users, adequate space for parking, for cafeterias and this type of thing. Then we have indicated a geographic area we feel would allow us to retain our employees that we currently have working for us.

That is the basis of this prospectus. That will go out and we will get competitive bids from people in the area on the basis of that, and then a selection would be made. Hopefully, we would be obtaining new leases sometime in that 1996–1997 time frame.

Mr. Moran. Have you determined whether you would have preference to own or lease space?

Mr. Kirk. Well, from the standpoint of our users, it would be obviously preferable for us to own the space, because that is the least cost. However, this creates some problems within the government, because when one owns space and has to buy the space, there is a very big up-front cost associated with that. So, there is a strong preference not to have to swallow a very big up-front one-time cost like this. The preference now is for lease, because that keeps the annual costs down.

Mr. Moran. Unfortunately, some of those calculations have been based upon what GSA is charging rather than what the actual lease rates are. When you plug the actual lease rates in, it becomes a tougher call whether it is actually in the best interest to own or lease.

Well, let me let Mr. Skaggs have a chance as well. Thank you for your responses.

Mr. MOLLOHAN. Mr. Skaggs.

INTELLECTUAL PROPERTY RIGHTS

Mr. SKAGGS. Thank you, Mr. Chairman.

I wanted to really ask you to address some policy areas that are initially beyond budgetary issues, but I think carry budgetary implications. To what extent has the Patent Office been involved in the development of sort of the competitiveness strategy that this Administration is wanting us to pursue?

We hear an awful lot about the central importance of intellectual property rights, our protection of those relative to our international competitors, and the intellectual properties component of the GATT negotiations. I want to get a feel for whether you all have been playing a role in that; and whether you think you should have been playing a bigger role in that.

Mr. KIRK. Well, thank you for the question. I love it. This goes back to my usual hat, which is the Assistant Commissioner for External Affairs.

We have been working very hard with the Office of the Trade Representative on a wide variety of fronts. During the Uruguay Round negotiations on intellectual property, we were represented during the entire seven years of that negotiation on the delegation of USTR. Indeed, at the end I wound up, through longevity, leading that negotiation at the closing days of 1991 that developed the so-called trade-related aspects of the intellectual property rights text, the TRIPS text on intellectual property.

We worked with USTR, and, for example, currently we are working with them in a review of the Special 301 process, where we go through the laws of all of our trading partners to determine whether or not their patent trademark and copyright laws are adequate, according to our standards. Is the enforcement adequate? What problems are industries having with the countries involved? We are participating fully in that interagency process.

I have working for me a small cadre of patent, trademark, copyright, and trade lawyers. In fact, they are the only intellectual property lawyers that do this sort of business in the entire government. That is one of the reasons why we work with USTR, Department of Commerce, and Department of State on these sorts of issues.

We have also been very active in working with the State Department on the patent law harmonization negotiations, on the question of whether the United States should accede to the Madrid Protocol for Trademarks, which would allow U.S. trademark owners, for example, through filing a single application in the United States Patent and Trademark Office, to have that application span out over the world into a number of countries with a single filing. Much like we already have with the Patent Cooperation Treaty, where you file a single application and it spreads out into as many as 54 countries.

So, we are doing a number of things with a number of agencies on this front, because indeed, we believe that strong protection for intellectual properties abroad is vital to our interest. We believe that is where our future is.

Mr. SKAGGS. Well, at the risk of an awkward metaphor, it seems to me this type of designing a next generation automobile is absolutely critical, as well as the mechanical work you are doing on the vehicles currently on the road. And I just want to make sure you have the resources you need to inform our government-wide negotiation efforts in these various areas.

Is that piece of your budget adequately covered in what OMB has blessed?

Mr. KIRK. Yes, our resources for that are adequate to the task, because we have sufficient resources. It is not a terribly resource intensive operation in terms of people. Probably the bigger problem has nothing to do with the budget that we have or don't have, it has more to do with finding qualified people that are willing to work for government salaries to do the job. That is probably a far more difficult task. The numbers involved are not large.

INTERNATIONAL APPLICATIONS

Mr. SKAGGS. I didn't realize that there was this spreading out globally to, I think you said, 54 countries based on a filing that would be made here. Do those 54 countries include most of the markets in the developed world that our companies are going to be concerned with? Are there big holes in that network?

Mr. KIRK. No, there are not at this point. It includes all of the major European states, Japan, Korea, Mexico, and recently Canada. So one can use the Patent Cooperation Treaty to their advantage to get worldwide protection, to date, in 54 countries, and it is growing very rapidly.

The process is that you file a single application in the U.S. Patent and Trademark Office and it is called an international application. We search it and then we send that application and the results of that search to an organization in Geneva called the World Intellectual Property Organization and it gets fanned out to all the countries you have designated. You don't have to designate them all; you can pick and choose among them.

So 20 months after you have initially filed that application, a counterpart goes to each of the countries that you have designated and arrives there as if it were a national application which you had filed. At that point then you begin proceeding as if it were a national application, which indeed it becomes, and you proceed under the national laws of each of those countries.

But it does give you a way to get on file quickly in the English language and spread it out throughout the world.

Mr. SKAGGS. You mentioned the Special 301. Is that under the Trade Act?

ADEQUACY OF ENFORCEMENT MECHANISMS

Mr. KIRK. Yes, it is. That is under the Trade Act.

Mr. SKAGGS. Does that mean you are looking at the adequacy of enforcement mechanisms among our trading partners essentially?

Mr. KIRK. Yes, we are.

Mr. SKAGGS. And what are you finding?

Mr. KIRK. A mixed bag. If one were talking about certain countries, for example, in the Far East, Taiwan does not distinguish itself with outstanding enforcement mechanisms. Even, for example, some of our European trading partners could do better jobs. Spain comes to mind. It has had some recent difficulties with respect to the trademark field. So we look at all of the areas.

You rightfully point out enforcement, because that is probably the most difficult to get your hands around. The question of inadequate enforcement can be the fault of the country, or can be the fault of the applicant. It is a much more difficult thing to deal with. But we look at patents and trademarks; we look at copyrights, industrial designs, et cetera, and in each of those countries we look at enforcement and try to make judgments.

Then, based on the overall picture we see and how much effort these people are making to improve their system, how much investment they are making to adopt a new patent law, a new trademark law, how much are they doing to increase the enforcement in the country. An evaluation is made and they are told, okay, you are moving along adequately, we will do nothing; or they get on the watch list, the priority watch list, or if they are doing nothing they are designated. At that point, then, intense negotiations begin.

The idea is that the country must eliminate these offensive provisions; the inadequate enforcement or the inadequate laws. They must eliminate those and have definite plans for when that issue will get well or the Trade Representative can ultimately seek some type of retaliation.

Mr. SKAGGS. So if there is, essentially, a willful or intentional government policy in one of these countries to turn a blind eye to reasonable requests for enforcement, that would presumably get them into this designation category on the Section 301 list at some point?

Mr. KIRK. At some point, yes, it would.

Mr. SKAGGS. And I have heard also that improved and more consistent international enforcement is one of our negotiating objectives in that aspect of the Uruguay Round that you referred to earlier?

Mr. KIRK. Very much so. The Uruguay Round has, I think, the first detailed chapter on enforcement of intellectual property rights of any international agreement ever. Now, of course, it is not yet in effect.

What happened is that NAFTA came along and, basically, the NAFTA text on intellectual property started with the Uruguay Round text on intellectual property. Since we were only dealing with three countries, then it was, obviously, easier to make improvements in certain areas. Where you could not make it in the context of 100 nations, you could make it in the context of three.

But, the enforcement aspect of NAFTA is essentially identical to that in the TRIPS text, and of course it may well be the first implemented, but that is an extremely important aspect of both of those agreements.

ECONOMIC VALUE OF ID PROTECTION

Mr. **Skaggs**. Do we have any kind of economic model that can attach a value to the U.S. economy of that aspect of the current GATT draft or the Uruguay Round draft text, the TRIPS; if that is the acronym you have used?

Mr. **Kirk**. Yes.

Mr. **Skaggs**. I just wonder. My impression is that it is enormously important for us relative, to some of the other areas that we are still pushing on, whether it is subsidies for agricultural products or whatever. It is always a gamble about how much you continue to want to get a better agreement for U.S. purposes without risking the whole thing falling apart.

And I wonder if we have been able to attach any kind of per annum dollar figure to what we think we will realize out of this enhanced intellectual property protection.

Mr. **Kirk**. To start by answering the question of whether there is a model, there is not. It tends to go more industry by industry, and as you may recall, the International Trade Commission did a study about four years ago at the request of then-Trade Representative Clayton Yeutter, and they came out with a range of figures, something in the $40 billion to $60 billion range.

Mr. **Skaggs**. Per year?

Mr. **Kirk**. Per year, lost to inadequate, ineffective intellectual property protection. I think based on the survey and the way it was taken, I would not stake my mortgage on its accuracy, but it is a big number.

INTERNATIONAL COOPERATION

Mr. **Skaggs**. Where is the PRC in this particular area?

Mr. **Kirk**. The PRC, when facing the possibility of a designation has moved very well in the last 12 months. They have joined the international, the premiere international copyright convention, the Berne Convention. They have upgraded their patent law to now protect pharmaceuticals and agricultural chemicals.

They have also agreed to what is referred to as a patent pipeline, which means that if I am a pharmaceutical or an agricultural chemical company, I make an invention today but it will be 10 or 12 years down the road before I can actually use it commercially. I have to go through the clearance process. To a country that adopts patent protection for pharmaceuticals or agricultural chemicals for the first time, the pipeline concept means the United States will not ask the country to take anything off the market that it has already put on the market. We do not try to take anything away that a country's companies and citizens are already using. But, if they are looking at some of these inventions that are in the regulatory pipeline in the United States, and that are already the subject of a patent but have not yet been approved for use if they are thinking of using some of those inventions, the patent pepeline concept says to stop now. Don't wait until the patent in the U.S. expires before it's put on the market in their country.

The Chinese have agreed to that type of a system. They have come a long way. However, they still need improvement in the enforcement area.

Mr. **Skaggs**. I was going to say, you are talking about putting a structure in place. Whether or not it actually operates successfully is an open question still, I gather.

Mr. **Kirk**. I think it takes time. The easy task is to develop the law. The more difficult task that can only be determined with time and observance is the law being enforced.

PATENT TERM EXTENSION

Mr. **Skaggs**. A more domestic question. I'm interested in your relationship with the FDA, the interrelationship between the length of patent and drug approval process, research monies going into the development of new pharmaceuticals, and the public worries about the costs of those. There have been suggestions that we should have a longer patent period protection for pharmaceuticals because of some of these things, and I would like to hear your cut on all of that.

Mr. **Kirk**. Well, back in 1984, the Congress culminated a number of years of efforts with what was referred to as the Patent Law Extension Act. Basically that Act was a series of compromises that we think benefits both the companies as well as consumers, because it has a balance to it.

Pharmaceutical companies, take 8 to 12 years to obtain marketing approval for a new chemical entity, especially when it's the first time use and there is no evidence about its safety and efficiency. The effort is divided into two phases. One phase is research effort and documentation effort the company does on its own, and then a second period is when all of this data is turned over to the Food and Drug Administration and they review it to determine the data's adequacy. Half of that first period and all of that second period is added back and the patent term is extended by that amount with a cap of five years.

Mr. **Skaggs**. That is current law?

Mr. **Kirk**. That is current law. If the review takes 10 years and one starts the process at the same time they file a patent application, it cuts maybe eight years off the effective market, then you get five years added back on.

Now, at the end of that, if a generic pharmaceutical company wished to manufacturer that same product, it had to develop a lot of the same data. It had to go through some large hurdles in order to get that product on the market, even though the patent was expired, because it had to go through certain of the same regulatory approval process.

Coupled with the patent term extension, what was called the abbreviated new drug application procedure. It sped up the time when a generic firm could get on the market. Basically, the law extended the patent for the proprietary company, but then allowed the generic firm to bring that product on the market much quicker and much more fully at the end of the patent term. So the law struck a balance.

I am not aware at this time that there has been a great deal of effort to change that particular process. The Japanese have adopted a patent term extension proposal and so have the Europeans. They have followed the U.S. model on this, and we try to encourage other countries as well to follow. I think there has been relative comfort with the way our law has operated.

COMPARABLE PROCESSING TIMES

Mr. SKAGGS. How does the basic processing time for an application acted on here compare with the comparable processes in the EC, let's say, and Japan? Obviously, there are costs involved in that and I am wondering how we stack up?

Mr. KIRK. In terms of time, we are by far the leaders. Our current average pedency time from the date the application is filed until the date the patent is issued-on an average-is 19.1 months. Now, that would contrast with an average in Japan of approximately 60 months, and in many cases, about 48 months in the European Patent Office.

Mr. SKAGGS. Through that international clearinghouse and Geneva process, that 60 or 48 months begins to run at the 20-month point that you said was sort of the trigger point for those designated countries to treat a U.S. filing as a filing nationally in their own countries?

Mr. KIRK. Well, it doesn't quite, because at the time it reaches these national offices and I think most of the American applicants go to the European Patent Office, which covers a number of those countries. At the time it reaches the door of these two offices, the patent comes in with a search already prepared so they are into the process.

Mr. SKAGGS. Okay.

Mr. KIRK. It is not like they are starting from scratch at that point.

Mr. SKAGGS. In any case, is it fair to conclude we don't have anything to learn from any of our competitors about how to speed this process up?

Mr. KIRK. Not on speed, no, sir, we do not.

Mr. SKAGGS. Thank you, Mr. Chairman. Thank you very much, Mr. Kirk.

PATENT FILINGS

Mr. MOLLOHAN. I have a couple of questions about the level of filings. How does the actual number of patent filings to date in fiscal year 1993 compare to what was anticipated when you submitted your 1993 budget request to us last year?

Mr. KIRK. I think we are a little below. In 1992, we had planned about 175,000 in 1992. We actually received 172,539. This current year we had planned for 182,000. We are running slightly below that, but it is too early to tell whether it will be significantly below or not. Because typically the last two quarters of the year are higher filing times.

Mr. MOLLOHAN. It sounds like it is tracking pretty closely, actually.

Mr. KIRK. It is tracking fairly closely, yes, sir.

Mr. MOLLOHAN. Do you feel that there is any impact from the 3.2 percent fee increase implemented in October 1993?

Mr. KIRK. No, sir, we do not. Overall, looking at the rates for filings over the years and the fee increases, there has been very little discernible impact on the level of applications filed. It probably has more to do with economic trends, for example, the number of applications coming out of Europe has fallen off some, and that probably says more about the European economy than it says about our filing fees.

The only times that we have really seen a direct impact on the level of filing was back in 1983, when we had what we referred to as the "September dump" because we were raising fees significantly on October 1 so everybody cleaned off their desks. We had this huge peak in September and it dropped down in October, but basically it caught back up and stayed on track.

Mr. MOLLOHAN. I cannot imagine any way that you could capture this information, but I am curious. The committee has been funding an advanced technology program through NIST for the last several years. Do you discern any increase in filings as a result of the advanced technology program, or is there any way for you to make that determination?

Mr. KIRK. I think it would be extremely difficult, because, first of all, we do not normally keep track of where the NIST money would go. We don't know who the beneficiaries are to make determinations of what they were doing was generating additional filings. At this point, we would really not have any information relevant to that.

JAPANESE PATENT SYSTEM

Mr. MOLLOHAN. When you were answering Mr. Skaggs' questions about the length of time it takes to process a patent in Japan, that is surprising to me, first of all, it would take 60 months.

Mr. KIRK. That is being kind.

Mr. MOLLOHAN. Indeed. Given their reputation, which may not be correct, for being able to commercialize technology far faster than we are able to do in this country?

Mr. KIRK. Well, I believe, Mr. Mollohan, that it has more to do with the Japanese approach to their patent system than it does with respect to anything else. There has been a lot of thinking in the United States and elsewhere that the Japanese do not view their patent system the same as we view ours. We view ours as a way to stimulate investment in research and development activities, to create new inventions. The payoff for this, if you are successful, is a limited exclusive right of 17 years.

Many feel that the Japanese take a rather different approach; that, to them, getting the technology disclosed so that all can see it, share it, and use it may be more of a motivating factor than the exclusivity associated with the patent right.

Indeed, they built a brand new state-of-the-art patent office in Japan just a few years ago. The day it was finished it was too small, and we have been after them for years to increase their staff. We had a staff of under 900 examiners back in 1982. We have now approximately 1750 examiners to deal with the increase in workload to keep our pendency down, to address the problem.

Mr. MOLLOHAN. Are you saying that they don't achieve protection and that they just achieve a certain currency through their patent process?

Mr. KIRK. They achieve protection, but they achieve it slowly.

Mr. MOLLOHAN. And what happens during the period in which they are processing the papers for the patent protection? Are other people allowed to use it?

Mr. KIRK. Yes. What happens in most other countries of the world is that 18 months after the application is filed, it is published. For example, looking at it from the standpoint of the United States, it is not 18 months from the date our applicant filed in Japan, it is 18 months from the date our applicant filed in the United States. Publication is measured from the earliest issuing date that the application has anywhere.

Forgetting PCT for a moment, if you go exclusively on a national basis, six months after you file in Japan, your application is published and it sits there for another four and a half plus years, published for anybody to see and use. Now, if they use it, at some point way down the road, they may have to pay you a royalty for the use. But in the meantime, they have enjoyed the fruits of your invention for that four and a half year or longer period of time.

It, in effect, is kind of a common trough and everybody comes in and uses what they like. Maybe they will pay royalties later, maybe they won't. If it is an extremely important invention, one that is fundamental to an industry, there is a funny way that those types of inventions have of taking a lot longer than 60 months.

Mr. SKAGGS. Would you yield on that, Mr. Chairman?

Mr. MOLLOHAN. Certainly.

Mr. SKAGGS. I am wondering whether we should also conclude that it is, in some sense, an ideal, at least in the way you view the operation of the office, that the publication date and the offering processing time ought to be roughly the same. We are at 19 months and 18 months, so the slippage there is minimal. Is that a correct inference to draw?

Mr. KIRK. Well, many people in the United States have long felt that there is a bargain that is struck between the applicant and the government and its citizens. The bargain is that I will disclose my invention to you and you give me an exclusive period of use.

When you go to automatic publication, any fixed date after filing, whether 18 or 24 months, you may not have your bargaining completed. So, you have had your invention disclosed but the Government has not promised you any exclusive rights yet. Some people feel that is the right thing to do, to get it done before there is publication.

Now, there is, obviously, another side to this, and that is that many applicants really are not interested in getting a patent right away and they don't mind the publication. If you see the publication of your competitors, you know where they are going, you know what to avoid, you can build on what they are doing. So there are side benefits of publication.

I don't mean it to be in a totally negative way, but we do believe it would be useful to be able to finish our work and that the publication be by the patent grant. If there is no patent, there is no publication.

Mr. SKAGGS. Thank you.

18-MONTH PENDENCY PERIOD

Mr. MOLLOHAN. What is the 18-month approval period? Why is 18 months a target? Seems like a long time to me.

Mr. KIRK. There are a number of reasons for that. First, it is the period that exists around the world for publishing applications. So, if we can complete our work and have our patents issued at 18 months, the applicant is literally going to know prior to 18 months whether they are going to get a patent. And if, in fact, they know that they are not going to get a patent in the United States, and if they have filed an application abroad, then they can take steps to stop that application from being published so that they can retain their invention to themselves. If it is capable of being used as a trade secret, they can do that.

Secondly, the 18-month period is about the optimum time from our standpoint of processing an application. The time from when an application comes into our mail room to when it reaches an examiner's desk is in the one to two month range after it goes through all the preprocessing, the examiner then writes a first opinion on patentability. The applicant responds and the examiner considers the arguments, and concludes the examination with a second opinion. The idea is to decide, okay, you either get a patent or you don't.

Now, if there is still a disagreement, the applicant can, obviously, appeal, but we have found this two-step process, which we call second action final, second action conclusion, works well to get the process ended within 18 months. It is doable in our experience.

A third reason, sort of an underlying reason, is the idea of getting the technology out to the public. We thought that 18 months does make sense as a time period to shoot for to have the technology out. Then you minimize wasted, duplicative research or somebody doing something that has been done somewhere else but has not been publicized yet.

Mr. MOLLOHAN. Mr. Kirk, we have a couple other questions which we will submit for the record. We appreciate your appearance here today and your testimony.

Mr. KIRK. Thank you, sir.

Mr. MOLLOHAN. Thank you.

[The following questions were submitted to be answered for the record:]

Questions for the Record from Chairman Smith

PATENT AND TRADEMARK OFFICE

Administrative and FTE Reductions

QUESTION:

The President has directed all Federal agencies to take certain reductions in full time equivalent (FTE) positions and administrative expenses. What impact will these directives have on the operations of the Patent and Trademark Office?

ANSWER:

First, cancellation of the 1994 pay raise along with savings from reductions for FTE positions and administrative expenses will reduce our 1994 request by approximately $14,846,000. Second, we have savings of $6,759,000 in space costs through a reappraisal of the commercial value of our leases. These actions, together with the projected growth in FY 1994 workloads and fee revenues, will enable the PTO to carry out the FY 1994 program with no CPI adjustment in patent fees.

However, the reduction in FTE positions will have a negative impact on our ability to maintain the quality and timeliness of our programs. The impact of the reduction in FTE positions to the PTO in 1994 is a cut of 351 FTE from our request to OMB. In FY 1994, with a reduced ceiling of 4,973 FTE positions the PTO will be able to manage this reduction through the application of several strategies.

- The PTO will preserve the "pipeline" production systems for patents and trademarks as much as possible. The goal will be to continue to maintain the pendency goals of 18 months for patents and 3/13 months for trademarks. In patents, FTE will be focused to areas of high activity and of the newest technologies, e.g., biotechnology and computer-related fields.

- Consolidate positions and eliminate overhead, e.g., sharing of secretaries.

- Increase use of overtime where cost efficient, e.g., professional patent and trademark examination.

- Discontinue lower priority tasks.

- Finally, if possible, to increase use of contractor provided services in lieu of Federal employees.

Beyond FY 1994, the problem becomes more severe and the PTO will not be able to respond to our ever increasing workloads with the reduced ceilings proposed for FY 1995 and beyond. For FY 1995 the reduced ceiling is four percent below our FY 1993 base. The proposed ceiling of 4,897 for FY 1995 will make it virtually impossible to provide the quality and timeliness of services for which our users will be paying.

QUESTION:

Please provide for the record a detailed breakout of the $15 million in salary administrative savings by object classification.

ANSWER:

	Object Class	1994 Pay Raise	Admin. Reduction	FTE Reduction	Total Savings
1111	Full-time perm.	(7,502)	0	(4,141)	(11,643)
1113	Other than full-time	(132)	0	0	(132)
1119	Total comp.	(7,634)	0	(4,141)	(11,775)
1121	Civ. pers. benefits	(1,243)	0	(1,160)	(2,403)
1210	Travel of persons	0	(11)	0	(11)
1220	Transportation	0	(14)	0	(14)
1233	Comm., util & other	0	(114)	0	(114)
1240	Printing & reproduct.	0	(27)	0	(27)
1252	Other services	0	(429)	0	(429)
1260	Supplies & materials	0	(73)	0	(73)
1990	Total PTO	(8,877)	(668)	(5,301)	(14,846)

GSA Rental Costs

QUESTION:

During last year's hearing, former Commissioner Manbeck was very concerned about increases in GSA rental charges for your space in Crystal City. You mention in your statement that your budget request reflect a $6.8 million savings resulting from a reappraisal of the commercial value of your leases. Does this mean that GSA was receptive to your concerns?

a. Please briefly describe for the Committee the process by which you were able to achieve this rent reduction.

ANSWER:

Conference Report 102-234 directed GSA to conduct a reappraisal of 1992 rent rates to be assessed for the Patent and Trademark Office (PTO) beginning October 1, 1991, for the office facility that the PTO leases in Crystal City, Arlington, VA. GSA conducted the reappraisal and issued a change in rental rates in March 1992 with the effective date of October 1, 1991. The reappraisal decreased PTO's space budget by $4.8 million (original budget $41.9 million, after the reappraisal $37.1 million).

The House Congressional Record (H9584) dated September 28, 1992 reflects the Appropriations Committee instructions that GSA apply the 1992 reappraised rent rates as the base rate from which annual adjustments will be made during the remaining four years of the five year rent cycle. The PTO's original budget for 1993 and 1994 was respectively, $50.4 million and $53.2 million. The adjusted budget for space based on the 1992 base rate is now $43.4 million in 1993 and $44.7 million in 1994.

The reappraisal of rent rates achieved in 1992 and the decrease in rates in 1993 and beyond was the results of the efforts put forth by the Appropriations Committees.

QUESTION:

What is the total amount requested for the GSA rental payments in your budget request, and how does that compare to FY 1992 and FY 1993? Have there been any changes in the total square footage occupied by the PTO?

ANSWER:

The total amount requested for GSA rental payments in the budget for FY 1994 is $44.7 million. The amount budgeted before the reappraisal of rent rates was $53.2 million. The following table shows changes in the amount budgeted for space and the average rent rate before and after the reappraisal. The average rent rate was computed by dividing the total square footage into the total cost for space.

	Total Space Budget	Average Rent Rate
FY 1991 Space Budget	$29,288,000	$22.65
FY 1992 Original Space Budget	$41,971,000	$30.46
Percentage of Change From FY 1991	+43.3%	+34.5%
FY 1992 Reappraised Space Budget	$37,106,000	$26.93
Percentage of Change From FY 1991	+26.7%	+23.6%
Savings From Reappraisal	$ 4,865,000	$ 4.28
FY 1993 Original Space Budget	$50,389,000	$35.30
FY 1993 Reappraised Space Budget	$43,360,000	$30.38
Percentage of Change From Original FY 1993	-16.3%	-16.2%
Savings From Reappraisal	$ 7,029,000	$ 4.92
FY 1994 Original Space Budget	$53,173,000	$36.21
FY 1994 Reappraised Space Budget	$44,687,000	$30.43
Percentage of Change From Original FY 1994	-19.0%	-19.0%
Savings From Reappraisal	$ 8,486,000	$ 5.78

The PTO has experienced some changes in total square footage occupied from FY 1992. The following table shows the total square footage occupied with changes from FY 1992.

Fiscal Year	Total Occupied Square Footage	Change in Square Footage
1991	1,292,768	
1992	1,377,817	85,049 Increase
1993	1,433,074	55,257 Increase
1994	1,468,417	35,343 Increase

Request to OMB

QUESTION:

What was your original budget request to OMB, what items did OMB eliminate from your budget request, and what will be the impact of those reductions on the ongoing operations of the Patent and Trademark Office? Please provide specific details for the record.

ANSWER:

Our original budget request to OMB was for 5,588 permanent positions, 5,324 FTE and $540,119,000. From that request, the following passback changes were made:

- A reduction for personnel savings of 351 permanent positions, 351 FTE and $5,301,000.
- A reduction for administrative expenses of $668,000.
- A reduction of $8,877,000 for cancellation of the 1994 general pay raise.
- An increase for the Employee Compensation Fund of $49,000.
- An increase of $151,000 for continued development and deployment of the PTO financial system.
- We subsequently proposed and OMB accepted the following changes: 1) a reduction of $8,486,000 in space costs for savings from reappraisal of the commercial value of our leases, 2) an increase of $1,705,000 for the Trademark program to be funded through a one-time increase above CPI to the Trademark application filing fee.

The impact of these reductions as stated above is quite significant. The dollar savings will enable the PTO to operate in FY 1994 without an increase for Patent fees. Only an above-CPI increase for the Trademark filing fee will be required. However, the impact of the reduction for FTE positions will be more significant. Through the use of various management strategies the PTO will be able to maintain quality and pendency goals in FY 1994 with the reduced ceiling of 4,973 FTE.

Beyond FY 1994, the problem becomes more severe and the PTO will not be able to keep pace with increasing demands for service by its customers with the reduced ceilings proposed for FY 1995 and beyond. For FY 1995 the reduced ceiling is four percent below our FY 1993 base. The proposed ceiling of 4,897 for FY 1995 will make it virtually impossible to provide the quality and timeliness of services for which our users will be paying.

Authorization Status

QUESTION:

What is the status of your authorization legislation for FY 1994?

ANSWER:

A bill to authorize appropriations in fiscal year 1994 for the Patent and Trademark Office (PTO) is currently under review by the Department of Commerce Office of General Counsel. We expect the proposed bill to be transmitted shortly to the Office of Management and Budget. The bill should be forwarded to the Congress within the next 30 days.

QUESTION:

Will the Administration's proposed legislation include any major changes from your existing authorization?

ANSWER:

In the main, there are no major changes proposed in the authorization bill for 1994. Components of the bill include:

- Authorizes the appropriation of $103,000,000 in fiscal year 1994 from deposits to the Patent and Trademark Office Fee Surcharge Fund established under section 10101 of the Omnibus Budget Reconciliation Act of 1990;

- Authorizes to be made available, to the extent provided in advance in appropriations Acts, offsetting fee collections;

- Seeks permanent authority for appropriated amounts to remain available until expended, i.e. "no year" funds;

- Authorizes the Commissioner to increase the trademark application filing fee beyond fluctuations in the Consumer Price Index (CPI) during the preceding twelve months. The fee is proposed to increase from $210.00 to $245.00 to address serious funding problems within the trademark operations of the PTO. Once established, the new fee would be subject to CPI fluctuations in 1995 and beyond. This is the only change from existing authorization language.

- Limits the authority of the Commissioner to enter into agreements for exchange of items or services related to automatic data processing resources with foreign governments and with international intergovernmental organizations.

QUESTION:

Will you be requesting any change in the authorization that would modify the scoring of the patent surcharge against the Appropriations Committee?

ANSWER:

There are no changes to the scoring of the patent surcharge in 1994. However, the PTO has drafted, with the agreement of the Department, a bill that amends the fee structure of the PTO, effective on October 1, 1995. The bill proposes to eliminate the fee surcharges that were imposed on patent statutory fees by the Omnibus Budget Reconciliation Act (OBRA) of 1990. The PTO would replace the fee surcharge imposed under OBRA with a like amount. In effect, the patent statutory fees of today that are charged to users would remain the same, except for inflationary adjustments from the Consumer Price Index. (For example, the current patent application filing fee is $710.00, which includes the statutory surcharge. Under the PTO proposal, the patent application filing fee would remain at $710.00, adjusted for inflation only.) All PTO fees would be treated as offsetting collections. Thus the PTO would not be required to deposit surcharge funds to a special account from which appropriations would be requested. There would be no "scoring" of budget authority in 1996, as the Fee Surcharge Fund would not be required. The PTO's request for budget authority in fiscal year 1996 would be zero. The proposed authorization conforms with the Administration's recommendations on patent fees as outlined in "A Vision of Change For America" and is consistent with the 1996-1998 budget projections for the PTO contained in the President's budget request for fiscal year 1994.

TUESDAY, APRIL 20, 1993.

GENERAL ADMINISTRATION

WITNESSES

GLORIA GUTIERREZ, ACTING CFO/ASSISTANT SECRETARY FOR ADMINISTRATION

SONYA G. STEWART, DIRECTOR FOR FEDERAL ASSISTANCE & MANAGEMENT SUPPORT

URIEL GOTTESMAN, DIRECTOR, OFFICE OF BUDGET OPERATIONS

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING & ORGANIZATION

MARK BROWN, DIRECTOR, OFFICE OF BUDGET

OPENING REMARKS

Mr. SKAGGS [presiding]. The subcommittee will come to order. Good morning, everybody. We will be hearing witnesses and considering the budget request from a number of agencies within the Department of Commerce this morning.

The first item we will consider this morning is the fiscal year 1994 budget request for the General Administration, Salaries and Expenses account for the Department of Commerce. The request is for $38,042,000, and increase of $6,330,000 above the amount appropriated for fiscal year 1993. We will insert the justification material submitted in support of this request into the record at this point.

[The justification follows:]

DEPARTMENT OF COMMERCE

SUMMARY SCHEDULES

BUDGET ESTIMATES FISCAL YEAR 1994

CONGRESSIONAL SUBMISSION

APRIL 1993

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DEPARTMENT OF COMMERCE
Summary of Requirements by Object Class
(Dollar amounts in thousands)

		Accounts in 1993 or 1994 Appropriations Bills					All Accounts		
		1992 Actual	1993 Estimate	1994 Base	1994 Estimate	Increase/ Decrease	1992 Actual	1993 Estimate	1994 Estimate
Em ment:									
	Full-time permanent positions	28,903	29,059	27,889	28,978	1,089	35,538	34,429	34,017
	Full-time equivalent	27,498	28,741	27,958	28,763	805	35,159	35,996	35,451
Obligations by Object Class:									
Personnel Compensation:									
11.1	Full-time permanent positions	1,044,165	1,160,312	1,154,504	1,229,605	75,101	1,302,929	1,438,423	1,490,149
11.3	Positions other than full-time permanent	64,692	58,896	47,315	53,555	6,240	105,015	104,743	95,651
11.5	Other personnel compensation	47,181	51,015	50,490	55,133	4,643	57,139	62,307	64,510
11.8	Special personnel services payments	71	280	248	248	0	72	280	2,014
11.9	Total personnel compensation	1,156,109	1,270,503	1,252,557	1,338,541	85,984	1,465,155	1,605,753	1,652,324
Other objects:									
12.1	Personnel benefits	224,949	253,541	258,691	291,164	32,473	284,160	315,308	350,037
13.0	Benefits for former personnel	13,288	13,594	8,516	8,554	588	15,416	16,738	11,756
21.0	Travel and transportation of persons	42,921	42,237	41,890	47,499	5,271	62,227	64,611	64,391
22.0	Transportation of things	11,343	10,808	10,585	16,774	6,189	15,581	16,141	21,128
23.1	Rental payments to GSA	110,534	148,365	160,510	161,856	1,346	164,318	204,238	218,878
23.2	Rental payments to others	23,074	18,187	18,011	19,565	1,554	29,704	28,714	26,032
23.3	Communications, utilities, and misc. charges	73,486	61,118	56,239	67,982	11,743	103,595	115,019	101,864
24.0	Printing and reproduction	58,135	54,549	51,813	56,323	4,510	69,374	71,197	71,602
25.1	Consulting services	10,775	10,276	10,172	13,106	(388)	16,489	16,292	18,679
25.2	Other services	817,729	923,640	832,471	1,017,888	165,417	1,015,780	1,168,017	1,318,310
26.0	Supplies and materials	89,329	70,509	68,800	73,920	6,120	116,360	102,375	105,581
31.0	Equipment	125,982	126,097	90,839	128,014	35,635	164,424	163,513	178,198
32.0	Land and Structures	13,638	139,050	91,958	103,813	0	14,614	140,367	104,959
33.0	Investments and loans	1,027	7,280	0	0	0	1,527	8,550	3,000
41.0	Grants, subsidies, and contributions	535,407	722,379	551,441	720,838	85,115	595,966	915,598	765,117
42.0	Insurance claims and indemnities	1,864	3,252	2,483	2,483	0	2,000	3,587	2,602
43.0	Interest and dividends	912	4,533	24	24	0	12,488	11,551	5,043
44.0	Refunds	48	0	0	0	0	51	1,200	0
92.0	Undistributed	248	0	0	0	0	248	0	10,145
	Total Obligations	3,308,878	3,900,100	3,504,598	4,068,144	461,559	4,151,723	4,984,765	5,049,624
	PTO Fee collections				(415,692)				
	DARRF Offsetting Collections				(1,500)				
	Financing				(19,300)				
	Transfer from Agriculture				(61,400)				
	STRS & ITS transfer to WCF				6,684				
	1994 Appropriation Request				3,576,936				

DEPARTMENT OF COMMERCE
SUMMARY OF CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1992 Actual	1993 Estimate	1994 Estimate
General Administration:			
Management & Professional Support Services	76	60	60
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	76	60	60
Bureau of the Census:			
Management & Professional Support Services	475	414	672
Studies, Analysis & Evaluations	2336	656	731
Engineering & Technical Services	594	1554	1514
Total	3405	2624	2917
Economic and Statistical Analysis:			
Management & Professional Support Services	292	730	342
Studies, Analysis & Evaluations		25	25
Engineering & Technical Services			
Total	292	755	367
Economic Development Administration:			
Management & Professional Support Services	0	0	0
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	0	0	0

	1992 Actual	1993 Estimate	1994 Estimate
International Trade Administration:			
Management & Professional Support Services	171	236	53
Studies, Analysis & Evaluations	477	0	0
Engineering & Technical Services	0	0	0
Total	648	236	53
Bureau of Export Administration:			
Management & Professional Support Services	26	15	10
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	26	15	10
Minority Business Development Agency:			
Management & Professional Support Services	0	0	0
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	0	0	0
United States Travel & Tourism Administration:			
Management & Professional Support Services	48	31	0
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	48	31	0

	1992 Actual	1993 Estimate	1994 Estimate
National Oceanic & Atmospheric Administration:			
Management & Professional Support Services	9229	10676	8348
Studies, Analysis & Evaluations	7356	7188	7238
Engineering & Technical Services	4892	5179	4362
Total	21477	23043	19948
Patent and Trademark Office			
Management & Professional Support Services	172	200	220
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	172	200	220
Technology Administration			
Management & Professional Support Services	106	256	571
Studies, Analysis & Evaluations	0	25	0
Engineering & Technical Services	0	0	0
Total	106	281	571
National Institute of Standards & Technology:			
Management & Professional Support Services	1102	913	1122
Studies, Analysis & Evaluations	0	0	0
Engineering & Technical Services	0	0	0
Total	1102	913	1122

National Telecommunications and Information Administration:	1992 Actual	1993 Estimate	1994 Estimate
Management & Professional Support Services..........	50	51	1056
Studies, Analysis & Evaluations..................................	0	0	0
Engineering & Technical Services..............................	0	0	0
Total	50	51	1056
Total, Department of Commerce			
Management & Professional Support Services..........	11747	13582	12454
Studies, Analysis & Evaluations..................................	10169	7894	7994
Engineering & Technical Services..............................	5486	6733	5876
Total	27402	28209	26324

THE OFFICE OF INSPECTOR GENERAL'S STATEMENT OF CONSULTING SERVICES AS REQUIRED BY TITLE 31 U.S.C. SECTION 1114(B)

During fiscal year 1993, the Office of Inspector General completed reviews of the reporting of consulting service contracts at two administrative support centers within the Department of Commerce. The purpose of the reviews was to determine the accuracy of consulting services data reported to the Federal Procurement Data System. Our draft reports, which were issued in February 1993, estimated that about $318,253 in consulting service contracts were not reported. Corrective actions have been recommended.

DEPARTMENT OF COMMERCE
SUMMARY OF PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
GENERAL ADMINISTRATION:				
Periodicals	0	0	0	0
Pamphlets	3	2	1	2
Audiovisuals	0	0	0	0
Total	3	2	1	2
BUREAU OF THE CENSUS:				
Periodicals	201	182	188	195
Pamphlets	2,400	2,607	2,800	2,200
Audiovisuals	160	82	86	88
Total	2,761	2,871	3,074	2,483
ECONOMIC AND STATISTICAL ANALYSIS:				
Periodicals	91	103	104	108
Pamphlets	9	12	11	12
Audiovisuals	0	0	0	0
Total	100	115	115	120
ECONOMIC DEVELOPMENT ADMINISTRATION:				
Periodicals	0	0	0	0
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	0	0	0	0
INTERNATIONAL TRADE ADMINISTRATION:				
Periodicals	716	897	1,015	1,101
Pamphlets	519	458	455	457
Audiovisuals	0	0	0	0
Total	1,235	1,355	1,470	1,558
BUREAU OF EXPORT ADMINISTRATION:				
Periodicals	386	335	194	196
Pamphlets	0	0	0	0
Audiovisuals	1	1	1	1
Total	387	336	195	197

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
MINORITY BUSINESS DEVELOPMENT AGENCY:				
Periodicals	27	86	68	88
Pemphlets	20	9	7	9
Audiovisuals	0	0	0	0
Total	47	95	75	97
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:				
Periodicals	0	0	0	0
Pemphlets	304	386	317	330
Audiovisuals	0	0	0	0
Total	304	386	317	330
NATIONAL OCEANIC AND ATMOSPHERIC ADMININSTRATION:				
Periodicals	685	931	968	986
Pemphlets	458	623	618	623
Audiovisuals	0	48	23	24
Total	1,143	1,602	1,609	1,633
PATENT AND TRADEMARK OFFICE:				
Periodicals	23	25	24	24
Pamphlets	39	35	46	46
Audiovisuals	6	11	8	8
Total	68	71	78	78
TECHNOLOGY ADMINISTRATION:				
Periodicals	5	5	6	6
Pemphlets	0	0	0	0
Audiovisuals	0	0	0	1
Total	5	5	6	7
NATIONAL TECHNICAL INFORMATION SERVICE:				
Periodicals	4	7	8	9
Pemphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	4	7	8	9
NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGY				
Periodicals	12	11	12	12
Pamphlets	24	49	47	47
Audiovisuals	14	0	3	0
Total	50	60	62	59

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION:				
Pariodicals	0	0	0	0
Pamphlets	16	50	58	75
Audiovisuals	4	42	15	15
Total	20	92	73	90
Total, Depertment of Commerce:				
Periodicals	2,150	2,582	2,587	2,725
Pamphlets	3,792	4,231	4,360	3,801
Audiovisuals	185	184	136	137
Total	6,127	6,997	7,083	6,663

DEPARTMENT OF COMMERCE

ANNUAL METRIC REPORT

JANUARY 1993

S-10

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XVII. APPENDIX 1. GUIDELINES FOR SUBMISSION OF ANNUAL METRIC REPORTS REQUIRED BY P.L. 100-418, SECTION 5164, METRIC USAGE . . 46

I. PREFACE

This report is an assessment of progress made by the Department of Commerce in implementing usage of the metric system of measurement. It is a required part of the Department of Commerce annual budget submission by the Metric Conversion Act of 1975 (P.L. 94-168, as amended by the Omnibus Trade and Competitiveness Act of 1988 [P.L. 100-418]) and OMB Circular A-11. This report is the submission for fiscal year 1994.

The content of this report was prepared by the Metric Program at the National Institute of Standards and Technology (NIST). It represents a compilation of the annual reports of the Department's offices and operating units on their metric transition plans and on the progress they have achieved.

II. INTRODUCTION

The 1988 amendment of the Metric Conversion Act of 1975 established a clear national policy of preference for use of the metric system of measurement in U.S. trade and commerce. The amended Act mandates metric usage by federal agencies in grants, contracts, and business-related activities such as regulations and publications. The mandate includes general guidance regarding avoidance of adverse economic impact of federal metrication initiatives. Furthermore, it encourages agencies to assist businesses, and particularly small businesses, in their voluntary conversion to use of the metric system.

President Bush's signing of Executive Order 12770, "Metric Usage in Federal Government Programs," provided a formal and coordinated structure for the Executive Branch metric transition. Requirements were also established for the Secretary of Commerce to lead and coordinate efforts by departments and agencies to implement Government usage of the metric system in accordance with the Metric Conversion Act, and to report annually to the President. Although the legal mandate for transition to metric usage by federal agencies applies to departments and agencies of the Executive Branch, a number of independent agencies, such as the Postal Service and agencies of the Legislative Branch, such as the Government Printing Office and the Joint Congressional Committee on Printing, are also actively participating in the transition process.

This report is a statement of the progress toward implementing the metric system of measurement, including actions that have been taken as well as actions that are planned, that has been made by the offices and operating units of the Department of Commerce. It is a compilation of the reports of the Department's offices and operating units on their planned strategies and on the progress they have achieved.

The sections of this report conform to the format and content of the reporting guidelines approved for use by all federal agencies by the Interagency Council On Metric Policy. (The guidelines are contained in Appendix 1.) Therefore, each section describing the activities of a Departmental office or operating unit contains one or more "program elements" in accord with the guidelines. The program elements constitute the major functional activities of the Department. In most cases, a program element is congruent with a Departmental operating unit. The sections of the report cover, in order, the Metric Program at the National Institute of Standards and Technology, the Departmental administrative offices, and the Departmental operating units.

The individual office and operating unit elements were developed initially from information provided by the units in response to a request by the Metric Program and the Director of the Office of Program Planning and Evaluation for a "Metric Conversion Inventory, Plans and Strategies." The submissions that comprise this report are an update of the original reports. They were compiled and edited by the Metric Program staff only to the extent required for consistency of format.

III. METRIC TRANSITION RESPONSIBILITIES OF THE DEPARTMENTAL OFFICES AND OPERATING UNITS

The Department of Commerce is uniquely concerned with national economic and technical policies and objectives. The federal metric transition is one example. Nevertheless the offices and operating units of the Department of Commerce provide a wide spectrum of services to many and diverse clients. For this reason the development and execution of metric usage transition plans within the Department is decentralized and is the responsibility of the head of each major office and operating unit of the Department.

Overall policy and administrative direction is provided by Department Administrative Order (DAO) 201-21 of July 7, 1989. Additional administrative direction and coordination is provided by the Commerce Metric Committee (CMC), which is composed of the metric coordinators of the offices and operating units. Chairmanship and administrative support for the CMC is provided by the Technology Administration through the Metric Program of the National Institute of Standards and Technology.

The CMC members are provided additional policy and procedural guidance and other appropriate materials developed through the Interagency Council on Metric Policy and its several administrative and technical subcommittees. The CMC provides a forum for sharing the experiences of the operating unit metric coordinators.

The Under Secretary for Technology serves as the Department's Metric Executive and provides overall guidance for and coordination of the Department's metric usage transition activities. The Departmental Office of Program Planning and Evaluation administers the Secretarial Management By Objectives system which includes reporting of major metric transition objectives of the operating units. The Office of Program Planning and Evaluation assisted the NIST Metric Program in working with the operating units to refine their metric transition plans.

The diversity of the approaches taken and the variety of schedules for implementing metric usage in the various programs of the Departmental offices and operating units reflects the diversity of the missions and the variety of external factors involved. For example, metrication of the Census of Manufactures by the Bureau of the Census was constrained in the 1992 census by a lack of ability and interest of many firms to input the data in metric units and to use the resultant reports in metric units. Although improving awareness and support for the national metric policy in the business community is an essential part of the federal agency metric transition, awareness efforts by Census, as well as other Department of Commerce agencies that interact with the business community, are not yet major activities.

Another Department operating unit, NOAA, in its plans to implement metric usage in acquisition of new ships and satellites, must not only coordinate planning with the U.S. Navy and NASA but also with the involved industry sectors and individual suppliers.

The approaches taken by Census and NOAA are tailored to the specific circumstances and therefore the processes and associated schedules are appropriately different. Census is communicating plans and intent to make the metric transition, but will be moving ahead selectively at industry's pace. NOAA, in coordination with the Navy and NASA, will seek to influence the pace of change. The responses by industry to Census' and NOAA's approaches will control the pace of the metric transition.

IV. METRIC PROGRAM

The Metric Program comprises two major program elements. The first is the direction and coordination of efforts by federal departments and agencies to implement metric usage, in accordance with the provisions of Executive Order 12770. The second major program element is the leadership of the Department of Commerce's metric transition, in accordance with section 3 of the Metric Conversion Act of 1975 (15 U.S.C. 205b), as amended by section 5164(b) of the Omnibus Trade and Competitiveness Act of 1988.

A. Direction and Coordination.

1. *Program Element.* The NIST Metric Program provides the leadership to direct and coordinate efforts by federal agencies to implement use of the metric system of units. The mission of the Metric Program is to coordinate actions necessary to achieve the purpose of the Executive Order 12770 of July 25, 1991, "Metric Usage in Federal Government Programs." The Order's purpose is to implement the Congressional designation of the metric system of measurement as the preferred system of weights and measures for U.S. trade and commerce.

   Working with the Interagency Council on Metric Policy at the policy level, the interagency Metrication Operating Committee at the implementation level, and a number of functional subcommittees, the Metric Program:

   Coordinates the federal metric transition and promotes consistency in agency plans, policies and practices;

   Issues policy guidance on metric implementation for use by the federal agencies;

   Provides support for progress reporting, problem analysis, and corrective actions by the agencies;

Provides leadership for and participates in metric-related activities throughout the Federal Government;

Prepares Commerce Department plans and reports relating to metrication;

Assists in identifying and removing barriers that inhibit or block metric transition in federal, state, and local rules, standards, and codes or regulations;

Assists state and local governments in their efforts to facilitate the metric transition; and

Works with standards organizations and industry groups to assure that new and updated standards are consistent with the use of the international system of units.

Disseminates information on the metric system and on the Federal Government's metric transition to government organizations, business firms, educational groups, trade associations, private organizations, and the general public.

2. *Supporting Activities.* The supporting activities include publications, , direction and guidance to other agencies, and dissemination of information

3. *Measurement Sensitivity.* The activities of the Metric Program are not measurement sensitive in the sense that they do not use or generate numerical data having units of physical measurement. However, in the sense that they relate to the use and generation of numerical data by others in government, industry, and the general public, all activities of the program are measurement sensitive.

4. *Conversion Status and Sensitivity.* All direction and coordination activities of the Metric Program already use only metric units, except where the process of conversion to the use of metric units is illustrated by the comparison of metric and non-metric units. For example, conversion aids necessarily contain both metric and non-metric units. Wherever possible, documents and correspondence are printed on standard metric-sized paper.

5. *Transition Timetable.* As federal agencies and business firms make the transition to metric usage, the need for conversion processes and conversion aids will diminish and will ultimately cease to be a part of the Metric Program. Eventually, as the metric transition approaches completion, there will be no further need for the program itself.

6. *Federal, State, and Local Consultations.* The Metric Program chairs the interagency Metrication Operating Committee and its Steering Group, oversees the activities of the functional subcommittees, and acts as

secretariat to the Interagency Council on Metric Policy (ICMP), which is chaired by the Under Secretary for Technology.

During the past year, the Metric Program established guidelines that were approved by the ICMP for all federal agencies to use in reporting metric progress to the Secretary of Commerce on June 30, 1992. The program adapted the guidelines for all federal agencies to use in reporting metric progress annually to the Congress. In addition, information was provided and presentations were made to meetings of metric coordinators, procurement officials, and contracting agents at other federal agencies.

The Metric Program released a number of reports relating to its broad, interagency role. They included the Secretary's October 1, 1992 annual metric transition progress report to the President. In addition, they included the following NIST publications:

> *Recommended Agency Procedures for Implementing Federal Metric Policy,* NIST Interagency Report 4855 (May 1992).
>
> *The United States and the Metric System--A Capsule History,* NIST Letter Circular 1136 (May 1992).
>
> *A Metric America: A Decision Whose Time Has Come--For Real,* NIST Interagency Report 4858 (June 1992).
>
> *Metric Transition Plans and Activities of Federal Departments and Agencies,* NIST Interagency Report 4911 (September 1992).

A metric style guide for public affairs officials and a metric ruler are currently in progress.

Numerous Congressional offices requested and received information on the Metric Program and the activities of federal agencies. In the current fiscal year, metric information will be provided to all Congressional offices.

Interactions with state and local governments are important also because these governments engage in business activities with federal agencies. For example, they receive federal grants and they are affected by federal regulations. During the past year, the Metric Program participated in the activities of the National Conference on Weights and Measures (NCWM). At the annual NCWM meeting, the program chief presented an overview of federal metric transition activities and participated in a panel of a workshop on the metric amendments to the Fair Packaging and Labeling Act.

An invited presentation on the federal metric transition was given at a meeting of the Commerce Department's State Initiative Program. Many state and local government offices were provided information on the metric transition. Invited presentations to the National Governors

Association and the Sunbelt Caucus are planned. In the near future, information packets will be sent to all state governors' offices.

7. *Standards.* Metric Program staff work with a variety of standards organizations to promote the use of the metric system in all U.S. standards. One significant recent example: the American National Standards Institute's Task Group on Metrication recommended a new metric policy to the Executive Standards Council that the Council approved for public review and comment. The proposed policy is: "Metric (SI) units will be the preferred system of measurement quantities in American National Standards."

   The Standards and Metric Practices Subcommittee of the Metrication Operating Committee is working on a revision to Federal Standard 376A, "Preferred Metric Units for General Use by the Federal Government." The Metric Program has been actively participating in this process. Major changes proposed by the Program staff have been accepted. The new standard, designated 376B, will be submitted to the Metrication Operating Committee for approval early in 1993.

8. *Private Industry Initiatives.* The Metric Program assists industrial firms, especially small businesses, as well as trade associations by consulting with them on metric usage, by providing information on the metric system and the federal agencies' metric transition, and by referring them to other appropriate sources of information. Typically over one hundred telephone calls and visits are handled each month. Presentations were made at several industry association meetings during the last fiscal year.

   In September 1992, the Metric Program arranged an industry-focussed press briefing that was hosted by the Under Secretary for Technology. Representatives from the Government Printing Office, the General Services Administration, the National Aeronautics and Space Administration, Caterpillar Inc., and Rotor-Clip Inc. gave presentations to trade association reporters. Press kits and copies of the report, "Metric Transition Plans and Activities of Federal Departments and Agencies," were distributed to attenders.

   With guidance and assistance from the Metric Program, the National Institute of Building Sciences established the Construction Metrication Council. This council carries the leadership of the federal Construction Subcommittee into the private sector. All federal departments and agencies are committed to the target date of January 1994 when all federal construction will be completely according to metric standards.

   A survey of industry metric usage and capabilities is under development. The purpose of the survey is to provide private sector metric usage information that is needed by both federal agencies and by private firms to facilitate metric transition planning

9. *Public Awareness Initiatives.* Approximately 500 inquiries per month from the public are handled. An average of 400 metric information packets, tailored for teachers, federal employees, and business representatives, were mailed each month during the previous fiscal year.

   Program staff responded to reporters with information, contacts, and interviews. They participated in radio call-in shows and television appearances. Also, videotapes were made for other federal agencies.

   NIST (through the Metric Program) cosponsored the National Metric Conference, "Metrication '92," with the American National Metric Council and the U.S. Metric Association. Metric Program staff assisted in a variety of ways, including chairing discussion panels and presenting talks. There were about 200 conference attenders.

   Copies of the letter circular, *The United States and the Metric System--A Capsule History*, were delivered to the GSA's Consumer Information Center in Pueblo, Colorado for free public distribution. The current rate of distribution is about 10,000 per month, making this the current most-requested single-topic publication.

10. *Employee Training.* Metric Program staff recommended, evaluated, and helped develop classroom training and training materials for government agencies and private organizations that were submitted voluntarily. Information packets distributed by the program contain (unsolicited) information on training available from federal agencies and from the commercial marketplace. Staff of the Metric Program also participate in the Federal Employee Training Subcommittee.

B. Commerce Department Metric Transition Leadership

1. *Program Element.* The Metric Program has the responsibility to prepare the required reports and to assure that all Commerce Department offices and operating units carry out the mandates of the Metric Conversion Act and the provisions of Executive Order 12770. For the Commerce Department, the mandates and provisions include:

   Using the metric system in procurements, grants, and other business-related activities, within the conditions specified in the Order;

   Seeking out ways to increase understanding of the metric system through educational information and guidance in Department publications;

   Seeking out the assistance and cooperation of all parties affected by Commerce Department implementation of the Act and the Order;

   Formulating a Commerce Department metric transition plan;

Designating a senior-level official as Commerce Metric Executive;

Assuring that all reporting responsibilities are completed as required.

2. *Supporting Activities.* The supporting activities are administrative. The Metric Program chairs the Commerce Metric Committee, which meets quarterly, and cooperates with the operating unit metric coordinators. The program provides guidance and evaluates the plans, progress, and reports of the operating units.

3. *Measurement Sensitivity.* The activities of the Metric Program are not measurement sensitive in the sense that they do not use or generate numerical data having units of physical measurement. However, in the sense that they relate to the use and generation of numerical data by Commerce Department offices and operating units, all activities of the Program are measurement sensitive.

4. *Conversion Status and Sensitivity.* All Commerce Department metric leadership activities carried out by the Metric Program already use only metric units, except where the process of conversion to the use of metric units is illustrated by the comparison of metric and non-metric units. For example, conversion aids necessarily contain both metric and non-metric units. Publications of the Program are produced on standard metric A4 paper; however, A4 paper is not used for controlled and certain other administrative correspondence.

5. *Transition Timetable.* As Commerce Department operating units and administrative support functions complete the transition to metric usage, the need for conversion processes and conversion aids will diminish and will ultimately cease to be a part of the Metric Program.

6. *Federal, State, and Local Consultations.* The Metric Program prepared and submitted the Department of Commerce's annual metric transition report to Congress. Otherwise, this item does not apply, except to the extent that Commerce Department offices and operating units require guidance or assistance in their own interactions with other federal agencies or with state and local governments.

7. *Standards.* This item does not apply, except to the extent that Commerce Department offices and operating units require guidance or assistance in their standards-related activities.

8. *Private Industry Initiatives.* This item does not apply, except to the extent that Commerce Department offices and operating units require guidance or assistance in their private industry-related activities.

9. *Public Awareness Initiatives.* This item does not apply, except to the extent that Commerce Department offices and operating units require guidance or assistance in their public awareness-related activities. A

Commerce Department "Metric Awareness Week" was not held this year. It is likely that such activities will be supported in future years.

10. *Employee Training.* Metric Program staff recommended, evaluated, and helped develop classroom training and training materials for Commerce Department offices and operating units.

V. OFFICE OF THE SECRETARY

A. Assistant Secretary for Legislative and Intergovernmental Affairs

1. *Program Element.* The Office of Intergovernmental Affairs (IGA) is the liaison office between the Department of Commerce and all state, territorial, and local government officials.

2. *Supporting Activities.* IGA provides relevant materials through information dissemination to representatives of state, territorial, and local government offices.

3. *Measurement Sensitivity.* IGA serves the Department of Commerce primarily as liaison and resource office. Therefore, matters of a technical nature do not directly impact this office.

4. *Conversion Status and Sensitivity.* IGA is prepared to accept new government conversion standards and measurements applicable to office products and supplies.

5. *Transition Timetable.* IGA is prepared for the conversion of metric standards as they are issued. IGA foresees no problems in implementing metric usage.

6. *Federal, State, and Local Consultations.* IGA will continue to support the implementation of metric conversion by assisting with the dissemination of such information through its outreach functions, initiative programs, and Commerce duties, which include providing a forum for discussion and information exchange through programs such as the State Initiative Program, the President's Rural Development Initiative, the White House Office of Intergovernmental Affairs, Intergovernmental Update Report, and close partnerships with state governors, mayors, legislators, associations and councils.

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* Not applicable.

9. *Public Awareness Training.* Not applicable.

10. *Employee Training.* Not applicable.

B. Office of Public Affairs

The Office of Public Affairs will continue to ensure that the metric system is mentioned in Secretarial speeches and press releases when appropriate. It will also assist Commerce operating units in raising public awareness of their efforts in transitioning to the metric system.

The Publications Review Committee, which is part of the office of Public Affairs, will continue to encourage all public affairs directors and publication specialists to review their agency's publications for metric intent. We will work to ensure that units of measurement are converted to metric or dual dimensioning within the publication wherever appropriate and economically feasible.

VI. BUREAU OF EXPORT ADMINISTRATION (BXA)

1. *Program Element.* The mission of BXA is to direct the Nation's export control policy through processing license applications, conducting foreign availability studies to determine when products should be decontrolled, and enforcing U.S. export laws.

2. *Supporting Activities.* BXA issues the Export Administration Regulations (EAR) and assists industry in obtaining required product export licenses. The functions of BXA that involve use of measurement units are maintenance and revisions of the EAR, publications of "The OEL Insider," annual "BXA Update" seminars, and licensing operations.

3. *Measurement Sensitivity.* The EAR includes measurement usage in the classification of a variety of products.

4. *Conversion Status and Sensitivity.* The EAR, which contains the regulations and instructions for exporting controlled goods and technology from the United States, has been revised to convert to use of metric measurement units. With the agreement to the new "Core List," the U.S. and other members of the international Coordinating Committee (COCOM) reduced by about 50 percent the COCOM controls on strategic commodities for export. When this revision was made in the regulations on August 29, 1991, most measurement references were converted to the metric system. On December 31, 1991, BXA published a rule in the Federal Register completing the EAR conversion.

5. *Transition Timetable.* BXA will have completed transition to metric usage when the revised EAR is published in September 1992.

6. *Federal, State, and Local Consultations.* None applicable.

7. *Standards.* The EAR product descriptions have conformed to the Uniform Coding and Classification System since 1989.

8. *Private Industry Initiatives.* BXA has and will continue to advise both exporters and employees of the conversion of the regulations to the metric system in the following ways:

   The Exporter Seminar Staff of the office of Export Licensing continues to distribute flyers on metric conversion at their seminars.

   At the "BXA Update" seminar held in July and attended by over 500 exporters, BXA provided a copy of the new metric regulation along with metric conversion materials. This will be the third year that BXA has promoted the use of the metric system at the Update Seminar. The Exporter Seminar Staff of the Office of Export Licensing conducted 21 seminars throughout the country where the exporters were informed of given literature on BXA's efforts in the conversion process.

9. *Public-Awareness Initiatives.* BXA inserted a short news article on the metric regulation in the June issue of "The OEL Insider," a publication received by over 20,000 exporters. BXA includes mention of metric units in "The OEL Insider," in the Annual BXA Update Seminar, and in its "Metric Week" employee awareness activities. Secretary Franklin spoke at the BXA Update seminar and mentioned the 1988 changes in national metric policy and information about policy and conversion to use of metric units in all regulations, including export regulations.

10. *Employee Training.* BXA showed a three part video on the metric system to Bureau employees during Metric Observance Week in October 1991 and will do this again in 1992. New employees and those reassigned to activities involving significant use of metric units are trained on an "as needed" basis.

VII. ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

1. *Program Element.* The Economic Development Administration (EDA) generates new jobs, helps protect existing jobs, and stimulates commercial and industrial growth in economically distressed areas of the United States.

2. *Supporting Activities.* Federal grant and loan programs including:

   Public works constructions;
   Technical assistance, research and planning grants for studies dealing with economic development;
   Business loans;
   Economic adjustment assistance;
   Trade adjustment assistance.

3. *Measurement Sensitivity.* None.

4. *Conversion Status and Sensitivity.* EDA will adopt recommendations for metric usage requirements in future grant applications and reports

made by the Metrication Operating Committee's (MOC) Financial Assistance Subcommittee.

5. *Transition Timetable.* EDA will participate in developing and will follow MOC recommendations.

6. *Federal, State, and Local Consultation.* EDA coordinates its activities with other Federal agencies involved in issuing grants and loans through the MOC Financial Assistance Subcommittee. Negotiations are underway to fund a study on the impact of metric conversion on economic development. The results of this study will be considered in establishing implementation dates.

7. *Standards.* None applicable.

8. *Private Industry Initiatives.* None.

9. *Public Awareness Initiatives.* None.

10. *Employee Training.* Selected employees participate in metric training programs.

VIII. ECONOMICS AND STATISTICS ADMINISTRATION (ESA)

A. Bureau of the Census

1. *Program Element.* The Bureau of the Census collects, tabulates, and publishes a wide variety of demographic and industrial statistics about the people and the economy of the Nation.

2. *Supporting Activities.* Census will implement the recommendation to attend trade association meetings and conventions and communicate the Census efforts in conversion to metric units. We see the emergence of new efforts in the procurements and grants areas as well, and will report on this in future progress accounts.

3. *Measurement Sensitivity.* Measurement sensitivity is limited to a few programs in the Economic Programs area.

4. *Conversion Status and sensitivity.* In the Census of Agriculture, no additional information is scheduled to be published in metric units outside of the "Highlights Table." Aside from changes already introduced into the Current Industrial Reports publications and the plans to include metric conversion tables in the 1992 Censuses of Manufactures and Minerals, there are no plans to add any additional metric measures at this time.

   There is planned new construction (through the General Services Administration) for a computer facility. The specifications are being submitted to the contractor in metric units.

5. *Transition Timetable.* The practicality of collecting manufacturing data in metric units and the value to users of publishing in metric units is dependent upon the degree of metric usage in commerce and industry. Census is committed to the metric transition, but cannot get too far in front of the transition to general metric usage in industry.

   The new construction project will not be completed for at least two years. Gross design specifications have already been submitted to the contractor.

6. *Federal, State, and Local Consultations.* None applicable

7. *Standards.* None applicable

8. *Private Industry Initiatives.* Census does not plan to embark on any initiatives to encourage or accelerate transition to preferred metric usage in the private sector. However, communication and outreach to industry, perhaps involving participation in trade association meetings, might accelerate usage in Commerce and industry and facilitate the transition in measurement-sensitive programs involving product-related industry data.

9. *Public-Awareness Initiatives.* None.

10. *Employee Training.* Training in the data processing/data publication area, for employees continues on schedule.

B. Bureau of Economic Analysis

1. *Program Element.* The Bureau of Economic Analysis characterizes the U.S. economy through the preparation, development, and interpretation of the national income and product accounts. The only Bureau program affected by the conversion to the metric system is the publication of data on land holdings by foreign direct investors in the United States. Historically, these data have been requested and published in acre measurements.

2. *Supporting Activities.* There are no primary activities in support of the execution of the program element.

3. *Measurement Sensitivity.* This element is measurement sensitive because it includes activities that use numerical data (acres) and generates numerical data (hectares).

4. *Conversion Status and Sensitivity.* The survey in question continues to collect data in acres; such data is converted to hectares for reports.

5. *Transition Timetable.* The Bureau is maintaining the timetable established in its Metric Transition Plan, i.e., data for 1992, which will be published in 1994, will be collected in acres and converted to hectares for publication.

6. *Federal, State, and Local Consultations.* None required.

7. *Standards.* There is no impact of national or international standards and standards activities on the program element's metric transition. Similarly, there is no impact of the program element activities on standards and standards activities.

8. *Private Industry Initiatives.* None

9. *Public-Awareness Initiatives.* None

10. *Employee Training.* The minimal amount of employee training required will be accomplished on the job, with existing equipment used to convert data from acres to hectares.

IX. INTERNATIONAL TRADE ADMINISTRATION (ITA)

1. *Program Element.* The International Trade Administration (ITA) promoted world trade and strengthens the international trade and investment position of the United States.

2. *Supporting Activities.* The ITA organizations significantly involved with metric transition are the U.S. and Foreign Commercial Service (US&FCS) and Trade Development (TD).

3. *Measurement Sensitivity.* ITA programs are largely involved with advisory activities and the products are publications containing industrial and trade information, much of which is not measurement sensitive. However, product data presented in ITA publications are generally measurement sensitive.

4. *Conversion Status and Sensitivity.* The US&FCS has implemented metric usage through the following programs:

   During counselling sessions, trade specialists promote the use of metric units in product literature, promotional materials, correspondence, and quotations.

   Emphasis is placed on the metric system as the world measurement system in seminars, workshops, and conferences.

   All export documentation amounts are in metric units, including those on Shippers Export Declarations.

   District offices maintain files on metric materials.

   TD deals with the totality of U.S. industry. Where possible, the data in documents published by the various offices use metric units. Certain commodities and materials are still in the inch-pound system and will stay in this system until the world markets convert to metric units.

TD's industrial specialists report that there are no appreciable export problems with hard or soft metric conversions. All TD activities are using metric units within the limits of the international terminology used for the specific products. The only area where metric units are not used is aviation, which is a special case. The international commercial aviation market does not make predominant use of the metric system in aircraft manufacturing or in certain flight operations. All TD publications are either in dual units or are totally metricated. Analysts have been encouraged to keep data in metric form or in dual units. Industries are also encouraged to metricate, unless the international nomenclature is still in non-metric terms. Conversion of TD's data and information files presents no immediate cost or other barriers and can occur at the pace of metric usage in industry and commerce.

5. *Transition Timetable.* The transition to metric usage is considered to be essentially complete. The transition in ITA correspondence and publications from dual units to metric-only units in the presentation of measurement data related to specific industries will be linked to changes to metric usage in the industries themselves. There is no plan to proceed independently in conversion to metric sizes for printing of ITA's publications. ITA will encourage and support decisions of the Joint Committee on Printing and the Government Printing Office in implementing such a high visibility federal metric transition initiative.

6. *Federal, State, and Local Consultations.* None applicable.

7. *Standards.* ITA will follow industry practice, as appropriate.

8. *Private Industry Initiatives.* Because of the importance of metric usage for access and competitiveness of U.S. products in Europe and Japan, the office of European Community Affairs, The Office of Japan, and the President's Export Council staff work closely with the Metric Program office and with trade and other private sector organizations involved with metric transition and metric engineering standards issues. These working relationships and the resulting industry outreach continue to contribute positively to the implementation of the national metric policy.

   TD will be working very closely with the NIST Metric Program on the development and implementation of the proposed industry metric use survey. In addition, TD's internal examination of the metrication potential of several key industries will continue.

9. *Public-Awareness Initiatives.* ITA programs do not involve the general public, but metric usage advocacy is now an integral part of ITA's interaction with American industry.

10. *Employee Training.* New ITA employees who will be significantly involved with the use of measurement units are trained in metric usage, as required.

X. MINORITY BUSINESS DEVELOPMENT AGENCY (MBDA)

1. *Program Element.* The Minority Business Development Agency (MBDA) develops and coordinates a national program for minority business enterprise. MBDA promotes metrication through dissemination of information to its Region and District Offices and to its National Network of over 100 Minority Business Development Centers.

2. *Supporting Activities.* The MBDA funds private sector organizations to operate a service delivery network which provides management and technical assistance to minority-owned business.

3. *Measurement Sensitivity.* The services provided by MBDA do not involve significant use of measure units, but the agency's mission calls for it to provide awareness and assistance to client firms regarding issues which can have a significant economic impact. The national metric transition is such an issue. The transition to metric usage by federal agencies in contracts can have a considerable impact on minority firms.

4. *Conversion Status and Sensitivity.* Not applicable.

5. *Transition Timetable.* Not applicable.

6. *Federal, State, and Local Consultations.* None applicable.

7. *Standards.* None applicable.

8. *Private Industry Initiatives.* As part of the Agency transition to metric usage, MBDA has incorporated awareness of the metric system into the work requirements section of each Competitive Application Kit for all Agency funded programs. The requirement was incorporated in the fiscal year 1992 Competitive Application Kits.

   Metric awareness is part of the Management and Technical Assistance (M&TA) being offered to minority business enterprises.

   MBDA requires its Regional Directors to monitor the Agency's progress in promoting metric awareness throughout its client service delivery system. A memorandum was sent to Regional Directors requiring that they keep track of and report any metrication assistance and awareness activities in their regions. Regional Directors report on a regular basis any activities dealing with metrication services to clients.

   MBDA disseminates metric information to Regional and District Offices and to the MBDA Client Services Network.

9. *Public Awareness Initiatives.* The brochure, "The United States and the Metric System--A Capsule History," and information from the President's Export Council was distributed to all funded organizations and regional offices.

10. *Employee Training.* MBDA will conduct Metric Workshops at its Regional Offices, the National Training Symposium and at Minority Enterprise Development Week.

XI. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

1. *Program Element.* The National Oceanic and Atmospheric Administration (NOAA)

   Explores, maps, and charts the ocean and its biological resources and manages and conserves those resources;

   Monitors and predicts conditions in the atmosphere, ocean, sun, and space environments;

   Issues warnings against potentially destructive natural events;

   Assesses the consequences of inadvertent environmental modification;

   And manages and disseminates long-term environmental information.

2. *Supporting Activities.* The NOAA supporting activities are the Procurement, Grants, and Systems Program Office and the Education and Training Office.

3. *Measurement Sensitivity.* All NOAA line offices include programs involving extensive measurement and service activities as well as the acquisition and operation of measurement-sensitive systems and equipment.

The numbered items continue separately by Line Office. The NOAA Line Offices are:

National Ocean Service (NOS)
National Weather Service (NWS)
National Marine Fisheries Service (NMFS)
National Environmental Satellite, Data and Information Service (NESDIS)
Office of Oceanic and Atmospheric Research (OAR)
Office of NOAA Corps Operations (OAR)

A. National Ocean Service (NOS)

4. *Conversion Status and Sensitivity.* Almost all data publications are in metric format and no difficult barriers are foreseen to full transition to the metric system.

   The National Ocean Service surveys and charts the Nation's coastal waters, provides aeronautical charts for the Nation's airlines, undertakes scientific programs relating to the land and water environment of the oceans and coastal United States, and is a major contributor of oceanographic data worldwide. NOS collects, analyzes, predicts and disseminates environmental data to describe the earth system. It also monitors and predicts processes such as the coastal tides, currents, and water levels on the Great Lakes, and assesses the impacts of human activity on the coastal environment.

There are no significant barriers to the gradual metrication of nearly 1000 nautical charts and related publications other than resource limitations. Using mostly manual techniques, conservative estimates place conversion costs at between $5000 and $30,000 per chart, or $5M to $30M more than normal production and operational costs. This would require at least 10 additional cartographers over a 15-year period. Significant cost reductions are anticipated as the new automated nautical chart compilation and production system (ABCS 11) phases into full operation in the mid-1990's.

Scientific data and information generated by NOS's Offices of Ocean and Coastal Resource Management (OCRM), Ocean and Earth Sciences (OES), and Ocean Resource and Assessment (ORCA) are now acquired, processed, distributed and stored in metric units. An exception is the measurement of water levels. The only publication exception is the distribution of data in the *Tide Tables*, now printed in dual units, which will be printed in SI units when nautical charts are converted to metric format. The actions needed to fully metricate the few remaining processes are underway and no insurmountable barriers are foreseen.

NOS's Coast and Geodetic Survey (C&GS) still retains most of its nautical charting processes and chart products in the inch-pound system of units, but has an extensive and well developed program to change to metric units in the shortest practical time. C&GS's National Geodetic Survey (NGS) division data and measurements are collected and published in metric units. C&GS's Aeronautical Charting Division (ACD) is prepared to convert all aeronautical charts to the metric system, but there are no plans to do so until requested by the Federal Aviation Administration (FAA). The inch-pound system of units is still the standard used in aeronautical charts and instruments throughout the world, and changeover to metric units is primarily an air traffic safety problem. Formal international discussions to convert instruments and aeronautical charts to metric units are in progress, but multi-year delays are expected before the metric system is accepted for these charts.

Systematic conversions to metric units will be made to existing nautical charts and *United States Coast Pilot* publications. The *National Water Level Observation Network (NEWLON)* data processing, and tide data publications will be upgraded to the metric system in the shortest practical time. All actions must be consistent with the timing for conversion of nautical charts to metric units and with the resources available.

5. *Transition Timetable.* These actions correspond to those in NOAA's *Metric Transition Plan*, of September 1992, and shall be completed on the schedule indicated:

   Convert over 90 percent of the Next Generation Water Level Measurement System (NGWLMS) field systems to metric units by September 1992. All aspects if (NGWLMS), including data processing, began conversion to the metric system in January 1991.

   Publish *Tide Tables* in metric units only at a time which coincides with the nautical chart metrication schedule. Tide tables are now published in both inch-pound and metric units.

   Publish the Great Lakes Water Level Data in metric units only, at such time to coincide with the chart metrication schedule. Great Lakes water level data are published in weekly and annual reports in both inch-pound and metric units.

   Published twenty-one nautical charts in metric SI units by the end of fiscal year 92. C&GS estimates that its inventory of approximately 1000 charts will be published in metric units by about 2007.

   Constructed two new nautical charts, and converted five existing charts to metric units by the end of fiscal year 92.

   Project full operation of the C&GS Integrated Digital Photogrammetric Facility for fiscal year 95. The IDPF became operational in fiscal year 1991 to provide digital topographic data to metric charts.

   Provide a new *Nautical Chart Manual* with guidance for producing charts in metric units as scheduled in fiscal year 93.

   Continued to actively seek the cooperation of the U.S. Coast Guard and Corps of Engineers to deliver source data to C&GS in metric units beginning in late fiscal year 92.

   Complete a new *Coast Pilot Manual* with guidance for producing the *U. S. Coast Pilot* publication in SI units in mid 1993. Chapters will be converted to SI units in coordination with the nautical chart metrication schedule.

6. *Federal, State, and Local Consultations.* In May 1991, a nautical chart display poster was widely distributed by C&GS to educate and inform product users of the rationale for converting nautical charts to metric units. In January 1992, a pamphlet *NOAA Nautical Charts Are Going Metric* was issued to inform the public of the advantages of metric units in nautical charts and related products. In fiscal year 93, metric measurement units will be incorporated onto the *U.S. Coast Pilot* which is published annually. Chapters of the publication will be changed to reflect metric units on existing and new metric charts, and to provide instructions for using the new charts.

7. *Standards.* Standards employed for metrication of NOS products are the prevailing national and international standards in use in the nautical and aeronautical charting and oceanographic scientific community.

8. *Private Industry Initiatives.* NOS consultations on the metric transition will be incorporated into NOS's regular on-going consultative activities.

9. *Public-Awareness Initiatives.* The overall public information effort will feature C&GS exhibits at technical conferences and boat shows, and presentations to chart sales agents, pilot associations and boating education organizations.

10. *Employee Training.* Most administrative and support personnel in NOS will need training in the fundamentals of the metric system. NOS technical and technical support personnel are already familiar with the metric system and will need only minimal training.

B. National Weather Service (NWS)

4. *Conversion Status and Sensitivity.* The metric system has been in use by NWS for decades. Almost all internal calculations are performed in the metric system of units, especially the large computer simulations of the atmosphere done at the National Meteorological Center. Many of the more than 11 charts distributed to the professional community four times daily are now contoured in metric units. The WSR-88D radar system (NEXRAD), makes all calculations in metric units. Only the final displays are in the inch-pound system where direct transfer of information to users is required in inch-pound units. NWS plans to incorporate the metric system into all new procurement and program activities when conversion to metric units can be accomplished to coincide with budget limitations, international agreements, and other federal agency requirement--without significant danger to life and property.

5. *Transition Timetable.* NOAA's National Weather Service (NWS) shall complete the following actions on the schedule indicated:

   Formed a working group to evaluate the effectiveness of the training effort, and advise the Assistant Administrator (NWS) on the advisability of specific changes from inch-pounds to metric units in NWS products, beginning in fiscal year 92.

   Developed a listing of stock items likely to be procured with either inch-pound or metric specifications. Marginal costs will be tabulated and tracked and made a factor in making procurement decisions. NWS will purchase hardware with metric dimensions whenever practical beginning in fiscal year 92.

   Used the Console Replacement System as a pilot for the development of metric procurement procedures. The contract language, and especially the obstructions to contractors concerning metric dimensions for this project will be determined in fiscal year 92.

Continue to advocate usage of metric units in international and intergovernmental forums.

Negotiations have established the new Meteorological Aviation Report (METAR) weather code as the replacement for the SAO weather reporting code. METAR will merge the North American Aviation Code (English units) with the International Code, to provide a single code which allows reporting weather data in metric units worldwide. METAR will be implemented in two stages, the first to begin by July 1, 1993.

Replace the SAO weather data reporting code with the METAR weather code when established by international negotiations and FAA requirements. International implementation of software development for the METAR code is proposed to begin in July 1993.

Continue to monitor "value added" contractor requirements for weather and related information in metric units.

6. *Federal, State and Local Consultations.* User requirements generally determine the form in which NWS data are provided. Internationally distributed data, data provided in some weather and river stage forecasts, and storm watches and warnings are considered critical actions because they may affect public health and safety. Conversion to metric units must be carefully coordinated with users of the data.

NWS is given domestic aviation requirements by the Federal Aviation Administration (FAA). International requirements are obtained through the international Civil Aviation Organization (ICAO). Each organization acts responsibly and deliberately in matters concerning changes in aviation weather information, and is careful not to compromise aviation safety. Changes in parameters, e.g., cloud heights and altitudes, from inch-pound to metric units will continue to be slow, deliberate, and very much dependent on international agreement.

The watch and warning activities of the NWS assist the public in making decisions affecting the safety of life and property. Often, decisions are made rapidly under stress and conversion errors from metric to inch-pound units can result in the transmission of incorrect information. Thus, until educational initiatives and the metric transition effects on aviation safety are evaluated, The NWS will continue to produce products in the customary inch-pound units.

7. *Standards.* The metric standards NWS will use in its transition will be the prevailing international standards and data presentation formulas and units.

8. *Private Industry Initiatives.* Over 50 percent of NWS products are transmitted to "value-added" contractors for distribution to end users. If data were delivered to the contractors in metric form most contractors would convert the data to inch-pound format to meet end-user needs. Thus, noncritical information will be converted to metric units only after coordination with the user community on all matters concerning costs and processing requirements.

9. *Public Awareness Initiatives.* The public is generally unaware of the 1988 change in metric policy for federal agencies, and the reasons for the change. While the public "education" required to understand metric units used in metrology may not be a serious obstacle, a public awareness campaign should precede any effort to persuade "value-added" weather contractors to use metric units. NWS will coordinate development and implementation of these initiatives with other agencies that have programs with similar impact on public health and safety.

10. *Employee Training.* Training and education in the correct use of the metric system will be required of administrative, technical and operational personnel not already familiar with the use of metric units. Estimates of personnel and training requirements will be made available beginning in early fiscal year 93 when NOAA training curricula are developed and available.

C. National Marine Fisheries Service (NMFS)

4. *Conversion Status and Sensitivity.* The NMFS has been committed to the metric system of measurement for many years. NMFS scientific journals, the *Fishery Bulletin*, and *Marine Fishery Review*, have used metric units exclusively since 1955. All scientific data collections controlled by NMFS, including biological observations and fishery-independent measures from research vessel cruises, use the metric system.

5. *Measurement Sensitivity.* The traditional inch-pound measurement units continue to be used throughout the U.S. fishing industry including:

   Fish landings are recorded in pounds.
   Canned fish volumes are stated in ounces, pints, and quarts.
   Processed fish portions are stated in ounces.

6. *Conversion Status and Sensitivity.* Conversion of data to metric units is a routine operation for NMFS analysts when reporting to international organizations, such as the *United Nation Food and Agricultural Organization*. Data distributed to the public or to the fishing industry are generally reported in the same format as the original data. There is moderate to strong resistance to metric usage by various sectors of the fishing industry. The NMFS is sensitive to this problem since much of its data relies on voluntary contributions by industry.

International trade data are an exception to industry's use of inch-pound units. Beginning in 1990, records of import/export transactions supplied to NMFS by the Bureau of Census are in metric units. In response, NMFS converted trade data bases and publications, including the *1990 Import and Export Annual Summary*, to metric units at a cost of approximately $5000.

5. *Transition Timetable.* Internal use of the metric system within NMFS is widespread and has been well accepted since the mid-1950s. The NMFS will continue to encourage the fishing industry and the general public to fully adopt the metric standard by 1997. Some internal impediments to further metrication in NMFS include:

   Expenses for training NMFS personnel.
   Printing, forms redesign, and data processing modifications.
   Reluctance by the fishing industry to accept metric usage, and to supply and accept data in metric units of measure.

   The costs to overcome the internal and external barriers for transition to the metric system are estimated to exceed $225,000 over a 3-year period.

6. *Federal, State and Local Consultations.* Not applicable

7. *Standards.* No special standards required.

8. *Private Industry Initiatives.* The NMFS shall search for opportunities to:

   Meet with fishing industry leaders to discuss the benefits of adopting the metric system, and provide comments to NOAA's Metric Panel and DOC's Metric Program Office.

   Develop outreach programs and distribute material to familiarize the public and fishing industry with NMFS metric transition planning.

9. *Public-Awareness Initiatives.* Promote use of metric units through customer education using dual units in publications for the general public during transition, and promote fulfillment of fishery's data requests in metric/English units. This practice will be limited because NMFS estimates additional costs of $1M in computer usage, staff time, and printing costs are required. The resources needed are not available now.

10. *Employee Training.* Training in the correct use of the metric system will be required of administrative, technical and operational personnel not already well versed in the correct use of the metric system. Revised estimates of training requirements for NMFS personnel will be made in the first quarter of fiscal year 92 when NOAA training curricula are finalized.

D. National Environmental Satellite Data and Information Service (NESDIS)

4. *Conversion Status and Sensitivity.* NESDIS is incorporating the metric system into its day-to-day operations, subject to resource limitations. NESDIS data centers, i.e., the National Climatic Data Center (NCDC), National Geophysical Data Center (NGDC), and the National Oceanographic Data Center (NODC), operate in the metric system with some limitations:

   Most data received by NESDIS are in the inch-pound system and all data are archived in the same units as received.

   The format designed in 1982 for NCDC's digital data archives (TD-3200, TD-3210 etc.), provides for the inclusion of data in metric units.

   Data output from all NESDIS National Data Centers is delivered to customers in either English or metric units, depending on customer preference.

   NESDIS continues to emphasize metric units in all its activities, and to educate users to help them convert from English units to the metric system. An informal system has been established to remind the staff to "think metric." Metric is the preferred system of units for all NESDIS products and English units are used only when customers require information in the conventional system of units.

   NESDIS continues to work closely with the private sector to obtain estimates of the marginal costs to metricate the design, development and fabrication of NOAA's new satellite series. The probability of spreading such costs fairly among future users of space systems will be examined and decisions concerning the metrication of future NOAA satellites will be made by late fiscal year 92.

5. *Transition timetable.* The metric system will be used in all NESDIS operations, and in the design of future satellite systems for the post-1998 period, to the extent economically feasible. This action is dependent on the approach taken by NASA in managing NOAA's satellite system development program. NESDIS has been directed to use metric units for new satellite programs but the cost to do so may be high. However, phase A studies for the NOAA O, P, and Q satellites are being done in the metric system. The launch vehicle components are specified in the inch-pound system of units because they were designed and built years ago using inch-pound specifications.

   Requirements are placed on NESDIS by outside users to supply specific information in the English system of units. For example, the aviation industry (via the FAA) requires all NESDIS data and information describing cloud conditions that may affect aircraft safety to be delivered in English measurement units.

6. *Federal, State and Local Consultations.* Consultations with Federal agencies are primarily with GSA and NASA, as described in the following items:

   NCDC has requested the General Services Administration (GSA) to incorporate the use of metric units on all construction specification and designs for the new building in Asheville, NC, to the extent that funding and schedule permit.

   With NOAA's concurrence, NASA has initiated a requirement that metric units be used in the design, development and fabrication phases of the NOAA O, P and Q satellites. Since NOAA will fund these contracts, the marginal costs of the metric requirement would be borne by NOAA. No funds are currently available for this purpose.

   Some experts believe the design and tooling costs to convert an aerospace production line to metric standards could be substantial. NESDIS is concerned and believes such costs should be spread over future satellite production and among users of satellite systems.

7. *Standards.* Construction standards for the new building will be determined in consultation with GSA's Public Building Service. The standards for the design of satellites will be determined in consultation with NASA. The standards for data are determined by scientific and other user communities.

8. *Private Industry Initiatives.* Industry consultations will be coordinated with GSA and NASA as appropriate.

9. *Public-Awareness Initiatives.* None Applicable.

10. *Employee Training.* Most NESDIS personnel are familiar with the metric (SI) system of units, but typically do not think in metric terms. In the earlier stages of metric transition, dual units may be used in contracts, publications, and the dissemination of data if consistent with that recommended by NOAA and DOC.

    Two levels of training for use of metric units will probably be required by NESDIS. Administrative personnel need a basic level of familiarization with metric usage, and technical and contracts personnel need a more advanced level of training. In both cases the depth and intensity of training needs to be determined.

E. Office of Oceanic and Atmospheric Research (OAR)

4. *Conversion Status and Sensitivity.* NOAA's Office of Oceanic and Atmospheric Research (OAR) has long supported use of the metric system of weights and measures and uses the system in all its science and research programs. All eleven Environmental Research Laboratories (ERLs) use the metric system in their science programs. Cooperative research with the Joint Institutes also supports use of the

metric system in the university community. OAR research and development programs will continue to use the metric system of units in all scientific activities, and will promote use of metric units in procurement and administrative support functions, to the extent that it is economically feasible to do so.

5. *Transition Timetable.* OAR is essentially metric except for continuing use and maintenance of some existing equipment which incorporate inch-pound measurement units and standards.

6. *Federal, State and Local Consultations.* Not applicable.

7. *Standards.* All standards in current use are metric.

8. *Private Industry Initiatives.* Not applicable.

9. *Public-Awareness Initiatives.* Not Applicable.

10. *Employee Training.* OAR research staff are proficient in metric usage. Administrative and support personnel are trained as needed.

F. Office of NOAA Corps Operations (ONCO)

1. *Program Element.* Metrication in ONCO involves NOAA ship operations, ship maintenance, ship modifications, and new ship construction. The existing NOAA fleet of 21 ships and almost all permanent gear and equipment on board these vessels was constructed using inch-pound units of measurement. NOAA's Fleet Replacement and Modification (FRAM) program will specify new ship construction and/or major modifications. Although U.S. shipyards lack experience in metric design and construction, the Office of NOAA Corps Operations will attempt to use the metric system in all future ship construction, maintenance, and ship repair programs to the highest degree possible, without incurring prohibitive economic penalties or delays in the performance of these activities.

2. *Supporting Activities.* Ship operations, maintenance, modifications, new ship construction.

3. *Measurement Sensitivity.* All ONCO operations involve measurement use.

4. *Conversion Status and Sensitivity.* ONCO activities currently use the inch-pound system of units. Certain non-metric units, e.g., the knot, the nautical mile, and the fathom, are used internationally and will continue to be used in NOAA ship operations until new equipment is installed or other changes or agreements occur.

5. *Transition Timetable.* The transition planning and external consultation process is underway and ONCO is committed to metric

usage but, the date for competition of the transition has not been established. Potential barriers include:

Higher ship design, construction and modification costs and the extended time for performance of these activities using metric units.

Human factors including resistance to change, and the perception that higher metric transition costs will not be compensated by life-cycle cost reductions and benefits.

6. *Federal, State, and Local Consultations.* Consultations are focused on the U.S. Navy and the U.S. shipbuilding industry.

7. *Standards.* In coordination with the U.S. Navy, ONCO will use prevailing international metric standards.

8. *Private Industry Initiatives.* ONCO shall complete the following actions:

Conduct detailed discussions with senior U.S. shipbuilding executives to estimate the marginal cost and extension of time for performance, if use of metric specifications and standards are specified in new NOAA ship-construction contracts. An analysis of these potential additional costs and delays will follow as warranted.

Plan to solicit separate bids in inch-pound and metric units for NOAA Fleet Replacement and Modification (FRAM) program, beginning in fiscal year 1993.

9. *Public-Awareness Initiatives.* Not Applicable.

10. *Employee Training.* Metric training is required at two levels:

Basic metric training is needed for non-technical people to acquaint those unfamiliar with metric usage with the fundamental information needed for a smooth and rapid changeover to the metric system of units.

Advanced training of a motivational nature is needed for technical personnel and mid-level managers to examine:

> The detailed history of metrication efforts in the United States and its many advantages over the inch-pound system of units, as they relate to ONCO, the United States, and the international community.
>
> Examples of successful U.S. metric conversions, their problems, pitfalls, and strategies for success.

G. Office Of Administration, Procurement and Training Offices

2. *Supporting Activities.* Metric procurement requirements and specifications are developed by NOAA's Line Offices in response to

needs for goods and services. These are reviewed by NOAA's Procurement Offices, based on regulations designed to ensure acquisition of goods and services at fair and reasonable prices.

NOAA's metric policy is clearly defined in the *NOAA Metric Transition Plan*, September 1992: "NOAA shall use the metric (SI) system of measurement in all programs, procurements, grants and other business-related activities, consistent with international agreements, and other Federal, State, local agency and private sector requirements by September 30,1992, or by dates certain approved by the Deputy Under Secretary (DDS) of NOAA."

This policy makes Line Office program officials responsible for developing the requirements and specifications, and for implementing metric usage in procurement actions. The program officials will also establish procedures for reviewing procurement actions, including statements of work, to ensure NOAA's *Guidelines For Metrication* are followed. The Contract Officer, in consultation with the Line and Program Offices, shall have the primary responsibility for metrication decisions affecting cost and extent of competition.

NOAA has drafted *Interim Procurement Procedures* in Appendix A, Section 3.7 of the Plan, which are consistent with *Commerce Acquisition Circular 93-01*, but are more detailed to provide useful working guidance to NOAA program and procurement officials. Final Metric Procurement Procedures are being drafted, and after review should be distributed later in FY 93.

4. *Conversion Status and Sensitivity.* Beginning October 1, 1992, it is NOAA policy to use the metric system of units in all procurements unless it can be demonstrated, and determined in writing, that: (a) there are overriding economic, safety or other concerns that would render use of metric units impractical; (b) use of the metric system is likely to cause significant inefficiencies; or (c) metric usage is likely to cause a loss of markets for U. S. firms.

8. *Private Industry Initiatives.* None to date.

9. *Public-Awareness Initiatives.* None planned.

10. *Employee Training:* NOAA believes that appropriate training of procurement officials, program officers, and some NOAA administrative employees is essential to the success of the metric transition program. Funds were made available for metric training in July 1992 by the Deputy Under Secretary of NOAA, a contractor was selected, and the first program was developed for training procurement officials and specification writers. Three training sessions (two pilot sessions and one scheduled session) for procurement officials were convened in late fiscal year 1992. As a result of comments from these sessions, a metric training program with specific goals is being developed and additional training sessions for the remaining procurement and specification officials will be scheduled for early fiscal year 1993. Training of NOAA technical and administrative personnel will follow later in the second and third quarters of fiscal year 1993.

XII. NATIONAL TELECOMMUNICATIONS AND INFORMATION AGENCY (NTIA)

1. *Program Element.* The National Telecommunications and Information Agency (NTIA):

   Serves as the principal executive branch advisor to the President on telecommunications and information policy;

   Develops and presents U.S. telecommunications plans and policies at international meetings;

   Coordinates federal agency positions on telecommunications;

   Prescribes policy for managing use of the radio frequency spectrum;

   And serves as the principal federal telecommunications research and engineering laboratory.

2. *Supporting Activities.* Domestic and international policies.

3. *Measurement Sensitivity.* The NTIA master file of all frequency assignments, antenna heights, and service areas contains measurement units. Standards for government radio stations, propagation studies, publications and handbooks all contain measurement units.

4. *Conversion Status and Sensitivity.* All NTIA documents and computer files have been converted to metric units. New applications require metric usage.

5. *Transition Timetable.* The metric transition is complete.

6. *Federal, State, and Local Consultations.* Not applicable.

7. *Standards.* Standards are those employed in the telecommunications industry.

8. *Private Industry Initiatives.* None applicable.

9. *Public Awareness.* Not applicable.

10. *Employee Training.* Training is conducted for support personnel as needed. Professional staff members are familiar with the metric system.

XIII. PATENT AND TRADEMARK OFFICE (PTO)

The PTO does not engage in activities which are truly measurement sensitive. Therefore, the PTO has deemed it appropriate to use dual metric/inch-pound standards that provide for the use of metric units either alone or in addition to their inch-pound unit equivalents.

A survey of PTO senior staff officials and members of the patent bar was made to obtain their views on the feasibility of a rule change requiring measurements in patent applications to be stated in metrics. In view of the survey results and all other factors considered, it was determined that a rule change would not be feasible at this time.

A notice to re-emphasize PTO's present policy of strong encouragement for applicants to voluntarily use metrics in patent applications was published in the PTO Official Gazette on February 18, 1992.

The PTO Manual of Patent Examining Procedure had previously been converted to list all inch-pound measurements in their metric equivalents. Four other PTO publications (Basic Facts About Patents, Basic Facts About Trademarks, General Information Concerning Patents, and Disclosure Document Program) have been revised and all were reprinted by the end of September 1992 to include metric measurements.

A-4 size paper is used in patent applications filed under the Patent Cooperation Treaty (PCT) because it is an international requirement. PCT is an optional means to acquire patent protection in foreign countries. However, the number of PCT applications filed in the PTO is not significant. Requiring the use of A-4 size paper in all patent applications before it is widely used by the Government and the courts, an issue raised by PTO users, remains an existing concern that should probably be addressed by a government-wide policy.

XIV. TECHNOLOGY ADMINISTRATION

The Technology Administration serves as the focal point for U.S. science and technology policy and functions as a catalyst and facilitator to improve U.S. industry's international technological competitiveness.

A. National Institute of Standards and Technology (NIST)

1. *Program Element.* In addition to its long-standing mission to develop, maintain, and retain custody of the national standards of measurement, NIST assists industry in the development of technology needed to improve product quality, to modernize manufacturing processes, to ensure product reliability, and to facilitate the rapid commercialization of products based on new scientific discoveries.

2. *Supporting Activities.* NIST's mission supports U.S. commerce and industry with a broad program of fundamental measurement technology and related standards. In addition to NIST's core strength in metrology and technology services, NIST has responsibility for several important

outreach programs aimed at enhancing the efficiency, effectiveness and competitiveness of U.S. industry.

As a scientific organization NIST is fundamentally a "metric" organization and has, over a long period of time, been an advocate for the benefits of completing transition to metric usage. NIST has assumed responsibility for administering the Department's Federal metric transition leadership and coordination role. In addressing its own metric transition, NIST established a NIST Metric Committee and developed a transition plan.

3. *Measurement Sensitivity.* NIST's core and support programs are all measurement-sensitive to some degree.

4. *Conversion Status and Sensitivity.* The NIST Metric Committee developed a Metric Transition Plan which was initially approved by the NIST Director on June 12, 1990. The NIST Metric Transition Plan of June 12, 1990, was revised on November 29, 1991, and identification and approval of NIST-wide metric initiatives were completed on February 14, 1992. The implementation of the plan is organized into the following cross-cutting tasks designed to lead and support NIST's metric transition:

    NIST Metric Policy and Planning
    Procurement
    Technical Publications and Industry Outreach Communications
    SI Units--Interpretation for use in the United States

    In the area of procurement, the NIST storeroom stocks over 9000 items and over 30% are metric. The NIST Administrative Manual requires use of performance specifications expressed in metric units in the procurement of commercial products. In all non-stock procurement, including supplies and equipment, services and construction, NIST policy is to procure in metric units. While the metric system is not yet the accepted system, soft metric, hybrid or dual units may be used during the transition.

    Training of Acquisition and Assistance division staff was completed by September 30, 1992. A Procurement Brochure defining the NIST Metric Procurement Policy has been completed. NIST Metric Procurement policy and procedures for requisitions is scheduled for publication in the NIST Administrative Manual by the end of calendar year 1992. A major facilities acquisition program, announced in the Commerce Business Daily on February 13, 1992, stated NIST's intent to use SI metric in the project design and construction.

    In the area of technical publications, the NIST policy requires metric usage in all NIST publications. In addition to the requirement for metric usage, the following new publications have been issued specifically to facilitate metric transition:

NIST Special Publication 811, Guide for the Use of the International System of Units, September 1991.

NIST Special Publication 814, *Interpretation of the SI for the United States and Metric Conversion Policy for Federal Agencies,* October 1991.

NIST Letter Circular 1136, *The United States and the Metric System--A Capsule History,* May 1992.

NIST Special Publication 304, "Metric Chart."

NIST Special Publication 304A, "Metric chart and Brief History of Measurement Systems."

NIST Special Publication 330 (1991 Edition), *The International System of Units (SI).*

NIST also maintains a database and provides, on request, a bibliography of metrication documents and references.

The SI Units of Measurement, commonly referred to as the "metric system," are developed and modified by international organizations established and operated under the Treaty of the Meter. NIST represents the U.S. in the international organizations and interprets the SI system for use in the United States. These official interpretations are announced by notices in the Federal Register. The current interpretation was published in December 1990 and is promulgated through NIST Special Publication 330.

5. *Transition Timetable.* NIST is operating with some degree of preferred metric usage in place in all areas, including procurement and other support programs. There are no barriers to completion of NIST's metric transition. The major barrier to immediate conversion by NIST's extramural program grantees is that small companies tend to place a high priority on current customer needs or preferences for non-metric units.

6. *Federal, State, and Local Consultations.* NIST has extensive outreach to federal, state, and local government, professional technical groups and industry. Metric transition advocacy and assistance programs are not only institutionalized throughout NIST organizations and activities, but formal transfer of the Department's metric transition leadership, coordination and support functions, which is in process, involves extensive consultative activity.

7. *Standards.* NIST has primary responsibility for the Nation's measurement standards and for participation on behalf of the U.S. government in international activities and organizations involved with measurement standards. Metric usage, advocacy and technical guidance and assistance for metric use in U.S. commerce and industry is an integral part of these activities.

8. *Private Industry Initiatives.* A statement of NIST metric policy will be included in future calls for grant proposals in NIST's important extramural programs such as the Advanced Technology Program (ATP) and the Manufacturing Technology Center's (MTC) program. The application requests and award factors will consider metric usage as a factor affecting efficiency and competitiveness of U.S. export products.

9. *Public-Awareness Initiatives.* NIST's Technology Services activities involve development of a wide variety of products aimed at public awareness of the metric system and the U.S. metric transition process.

10. *Employee Training.* NIST scientific and technical staff are fully capable of metric usage. Training for support program personnel, such as procurement staff, was completed by September 30, 1992.

B. National Technical Information Service (NTIS)

1. *Program Element.* The National Technical Information Service (NTIS) receives scientific, technical, and engineering (STE) information in various media from numerous sources, archives the information, and makes copies available to its customers. NTIS does not alter the content of the STE products it receives, and performs no measurement activities requiring metric usage.

2. *Supporting Activities.* NTIS produces no original publications requiring metrication. NTIS does not perform in-house design of any equipment, and does not have grant programs.

3. *Measurement Sensitivity.* Not applicable.

4. *Conversion Status and Sensitivity.* As part of its overall marketing and outreach program to U.S. industry, academia, government and the general public, NTIS makes the following metrication publications available:

   Metrication in the United States. A Published Search, PB92-850973, $65.00, paper, domestic.

   International Systems of Units (SI). PB92-109032, $19.50, paper, domestic.

   Metric Conversion Activities of Federal Government Agencies in Compliance with P.L. 110-418, Section 5164, Metric Usage. PB92-120153, $19.50, paper, domestic.

   Interpretation of the SI for the United States and Metric Conversion Policy for Federal Agencies. PB92-126572, $17.50, paper, domestic.

   Federal Metric Report, 1987. PB89-114490, $19.50, paper, domestic.

Metric Handbook for Federal Officials; Recommendations of the Interagency Committee on Metric Policy. PB89-226922, $19.50, paper, domestic.

International System of Units, Physical Constants, and Conversion Factors, Second Revision. N732 6969, $12.50, paper, domestic.

Several new and revised metric publications developed by the National Institute of Standards and Technology (NIST) and other federal agencies are entering the NTIS system. NTIS in cooperation with NIST, is exploring way of improving the marketing of the available metric transition documents.

In the area of printing and publication, NTIS purchases printing services through GPO and will follow GPO and Joint Committee on Printing transition leadership.

In the area of supplies and equipment, NTIS orders general supplies and equipment through GSA. NTIS will follow GSA Federal Supply Service leadership in requisitioning in metric units. Solicitations for contracts for equipment will reflect a policy of encouraging commercial equipment suppliers to furnish equipment based on metric designs which can meet performance and other specific requirements at a competitive price.

5. *Transition Timetable*: Not applicable

6. *Federal, State, and Local Consultations.* Not applicable

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* Not applicable.

9. *Public Awareness Initiatives.* Not applicable.

10. *Employee Training.* NTIS employees are not generally involved directly in measurement sensitive activity. General employee awareness and familiarization is conducted as needed. Employees whose duties require metric knowledge (such as subject analysts) already possess such knowledge (B.A. degrees in the sciences) when hired.

XV. UNITED STATES TRAVEL AND TOURISM ADMINISTRATION (USTTA)

The mission of the United States Travel and Tourism Administration (USTTA) is to increase U.S. export earnings from trade in tourism by facilitating international tourism development, coordinating international tourism policy, carrying out statistical research programs designed to increase the American travel industry's awareness of the international tourism market, facilitating the entry of medium and small sized American travel companies into the market, and eliminating barriers to market entry for those companies. Efforts to support this mission are carried out by three program elements in the agency: the Office of Policy and Planning, the Office of Research, and the Office of the Assistant Secretary for Tourism Marketing. These elements in turn are supported by the Office of the Under Secretary for Travel and Tourism and the Office of Strategic Planning and Administration.

A. Policy and Planning

1. *Program Element.* The policy and planning element

   Initiates, directs, and coordinates the formulation of international tourism policies and programs as well as policies on rural and ethnic tourism and the environment;

   Identifies restrictive practices which act as barriers to the growth of U.S. tourism services;

   Supports and participates in trade negotiations to remove those barriers;

   And acts through bilateral and multilateral organizations such as the U.S.-Canada Free Trade Area Tourism Committee, the General Agreement on Tariffs and Trade (GATT), the World Tourism Organization (WTO), and the Bureau of International Expositions (BIE) to facilitate international tourism to the U.S.

2. *Supporting Activities.* The Office of Policy and Planning carries out the supporting activities listed below.

   Represents the national tourism interest in bilateral civil aviation negotiations with foreign governments and ensures that interest is considered when U.S. negotiating objectives and strategies are determined.

   Implements the tourism provisions of the U.S.-Canada Free Trade Area Agreement, other bilateral trade agreements, U.S. bilateral tourism agreements, and other country- or region-specific policy arrangements.

   Represents the Department at meetings of international, intergovernmental technically specialized agencies and their organs including the 97-member GATT; the 102-member WTO; and the 43-member BIE, which regulates the timing and operation of world's fairs.

   Provides support to and advises the U.S. Trade Representative in the conduct of bilateral trade negotiations which have the potential to affect the U.S. travel industry's access to international markets.

   Represents the agency at meetings of various joint commercial commissions chaired by the Secretary of Commerce.

Is responsible for developing a U.S. policy response to the tourism-related aspects of the European Community's 1992 Initiative.

Conducts bilateral and multilateral negotiations with other national governments to reduce or eliminate impediments to international trade in tourism.

Provides staff support to and coordinates the activities of the Secretary's Tourism Policy council and its policy committees.

Evaluates all proposals for international expositions to be held in the United States under PL 91-269.

Implements the tourism-related aspects of the presidential initiative on rural development and the Department's ethnic tourism policy.

3. *Measurement Sensitivity.* No activities within this program are measurement sensitive.

4. *Conversion Status and Sensitivity.* No conversion is required for any aspect of this element.

5. *Transition Timetable.* Not applicable.

6. *Federal, State, and Local Consultations.* Not applicable.

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* There are no such initiatives within the scope of this element.

9. *Public-Awareness Initiatives.* There are no such initiatives within the scope of this element.

10. *Employee Training.* There have been no employee training activities within the scope of this element.

B. Research

1. *Program Element.* The research element compiles economic and demographic data as well as information on traveler characteristics for international travel markets. It then analyzes and disseminates this data to meet the needs of public and private sector decision makers.

2. *Supporting Activities.* Principle components of the USTTA research program are listed below.

The USTTA Survey of International Air Travelers (In-Flight Survey) gathers essential marketing information from U.S. and international travelers departing the United States. This information includes comprehensive analyses of visitor characteristics, travel patterns and spending habits, and is also used to develop the Bureau of Economic Analysis data on U.S. international travel dollar accounts.

USTTA's Basic Foreign Travel Statistics is data on international travelers from four separate government sources: a monthly count of non-immigrant foreign visitor arrivals by country of residence based on the Immigration and Naturalization Service (INS) Form I-94, international air arrivals and departures of aliens and U.S. citizens by point of origin and destination--excluding Canada--derived from INS Form I-92, basic statistics on border crossings from Mexico, and basic statistics on border crossings from Canada.

Co-sponsored Consumer Surveys are jointly sponsored by USTTA and the Canadian government. The studies are conducted in major foreign travel markets of mutual interest. They establish U.S. competitive positioning; potential travelers' characteristics; prime market segments; and the images, attitudes, and international travel preferences of travelers. Data from these surveys guides development of U.S. public and private sector cooperative programs in the countries studied.

Marketing Program Evaluation Studies track and assess the effectiveness and impact of selected USTTA marketing programs. These studies include assessments of consumer information services, readership studies assessing promotional campaigns, tracking of changes in visitation patterns of specific target market groups, accounting of campaign-generated tour sales and trade show-generated industry sales, and surveys of seminar and conference attenders.

Econometric Studies are used in two different ways. The first is an International Travel Forecast Model. This program forecasts international visitor arrivals to the U.S. from major countries and world regions. It does so on a three-year time horizon. These projections are updated three times annually and are critical to the industry for anticipating market developments and marketing opportunities. The second is an annual study of the Economic Impact of Foreign Visitor Spending on the nation, regions, and states. This study, conducted under contract, establishes the distribution and economic impacts--business receipts, jobs, payroll and tax revenues--generated by international travelers' expenditures in the United States. These data are particularly useful in educating possible cooperative partners about the potential of foreign travel markets.

3. *Measurement Sensitivity.* No activities within this program are measurement sensitive.

Responsible for training, career development, financial management, and liaison with other segments of USTTA and Departmental program elements as well as for building a highly motivated, well-trained corps of tourism-oriented career foreign service officers for office operations abroad.

Solicits disaster relief financial assistance applications.

Evaluates disaster relief applications and monitors program achievements in generating international tourism to former disaster areas.

Cosponsors the Multilingual Receptionist Program with the Department of Education and airport and city authorities. This program provides interpreting assistance to non-English speaking international visitors to expedite their entry into the United States.

Maintains Regional Offices in eleven countries.

Regional Offices:

Operate cooperative travel development, technical assistance, and educational programs in cooperation with the U.S., Foreign Commercial Service, and local VISIT USA committees.

Develop and implement cooperative trade development and support programs which stimulate international trade in tourism to all areas of the United States.

Coordinate with U.S. and foreign travel industry marketing representatives who provide the public and private sector with support for USTTA's international tourism development program.

Conduct cooperative programs including cooperative advertising, journalist and travel familiarization tours, market development travel missions, tour development travel trade shows, media events, and marketing workshops and seminars for the travel industry to stimulate demand for U.S. tourism products.

Conduct cooperative support programs including the development of informational travel brochures and displays, consumer and trade information services, maintenance of film and video libraries, photo libraries, and reference library material to stimulate demand for U.S. tourism products.

Maintain consumer and trade information centers staffed by trained market specialists and information counselors to educate and motivate the international wholesale and retail industry to increase their efforts in behalf of international tourism export development to the United States; provide travel information to

4. *Conversion Status and Sensitivity.* No conversion is required for any aspect of this element.

5. *Transition Timetable.* Not applicable.

6. *Federal, State, and Local Consultations.* Not applicable.

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* There are no such initiatives within the scope of this element.

9. *Public-Awareness Initiatives.* There are no such initiatives within the scope of this element.

10. *Employee Training.* There have been no employee training activities within the scope of this element.

C. Tourism Marketing

1. *Program Element.* The tourism marketing element strengthens the competitiveness of U.S. tourism firms, serves as a catalyst to enable the American travel industry to develop promotion programs, and seeks to facilitate the entry of international tourism firms into additional markets.

2. *Supporting Activities.* The Office of the Assistant Secretary for Tourism Marketing supports USTTA's mission through activities in its Headquarters office in Washington, D.C., and the activities of twelve Regional offices located in key international market areas. The activities of the Headquarters and Regional offices are listed below.

   Headquarters Office:

   Establishes, implements, and supervises the agency's international tourism development program.

   Develops and implements cooperative international tourism development programs with U.S. regions, states, cities, and the travel industry.

   Establishes and maintains working relationships with U.S. tourism groups to enlist cooperative partners, and to provide technical assistance and training to the U.S. travel trade.

   Holds trade development conferences aimed at coordinating U.S. international tourism development in key international markets.

   Conducts program reviews to assess and direct USTTA activities abroad.

consumers and retail agents; and assist regions, states, and cities receiving disaster relief financial assistance in generating international tourism to their areas from selected country markets.

3. *Measurement Sensitivity.* Units of measurement are used in the agency's informational brochures and consumer and trade information service centers.

4. *Conversion Status and Sensitivity.* Complete. USTTA is already using the metric system exclusively in all its publications and information centers.

5. *Transition Timetable.* Not applicable.

6. *Federal, State, and Local Consultations.* Not applicable.

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* There are no such initiatives within the scope of this element.

9. *Public-Awareness Initiatives.* There are no such initiatives within the scope of this element.

10. *Employee Training.* There have been no employee training activities within the scope of this element. Travel counselors are already educated in the metric system.

D. Under Secretary for Travel and Tourism

1. *Program Element.* The Under Secretary is responsible for the management and leadership of USTTA, focusing the attention of private, state and local tourism officials on increasing U.S. export earnings through international trade in tourism and for directing agency activities including Executive Branch coordination, regional-state-city-industry-intergovernmental coordination and liaison, public relations support, and policy direction for the Travel and Tourism Advisory Board and Tourism Policy Council.

2. *Supporting Activities.* The Office of the Under Secretary for Travel and Tourism is not responsible for conducting specific programs such as those mentioned in the policy, research, and marketing elements. However, this office provides leadership, direction, guidance, and approval for all activities carried out by the agency.

3. *Measurement Sensitivity.* No activities within this program are measurement sensitive.

4. *Conversion Status and Sensitivity.* No conversion is required for any aspect of this element.

5. *Transition Timetable.* Not applicable.

6. *Federal, State, and Local Consultations.* Not applicable.

7. *Standards.* Not applicable.

8. *Private Industry Initiatives.* There are no such initiatives within the scope of this element.

9. *Public-Awareness Initiatives.* There are no such initiatives within the scope of this element.

10. *Employee Training.* There have been no employee training activities within the scope of this element.

E. Strategic Planning and Administration

1. *Program Element.* This element advises USTTA offices on all administrative matters. It coordinates the planning for and preparation of all budget submissions required by the agency, prepares operating and program budgets for USTTA units, monitors funds to ensure that they are effectively used and that limits are not exceeded, and coordinates and processes all requests for training, personnel, and procurement actions. It is responsible for the analysis and evaluation of information technology and information resources management. It is also responsible for coordinating the input and preparation of USTTA's strategic plan of operation.

2. *Supporting Activities.* Although the Office of Strategic Planning and Administration is not responsible for specific programs such as those mentioned in the policy, research, and marketing elements, it does provide operational support for these elements in matters of budget, training, personnel, procurement, technology, and strategic planning.

3. *Measurement Sensitivity.* Certain aspects of the procurement process are measurement sensitive. This is particularly true in the areas of printing, reproduction and graphics services, and equipment specifications.

4. *Conversion Status and Sensitivity.* On-going. All non-domestic procurements already use the metric system. Domestic procurement has not yet been converted to the metric system. Domestic conversion will be gradual, transitioning to dual units first and eventually to metric units exclusively as appropriate and practical. Use of metric paper sizes is in place in all USTTA offices outside the United States. Domestic conversion to metric paper sizes will initially target electronic and paper information exchange between USTTA's Headquarters office and Regional offices, electronic and paper information exchange between USTTA and other government agencies, and paper information dissemination to private sector partners and customers. It is anticipated that use of a metric format in facsimile transmissions to the private

sector, which constitute a major portion of USTTA's information dissemination activity, will be practical only to the extent that destinations are equipped to receive transmissions in metric format.

5. *Transition Timetable.* USTTA intends to convert to use of the metric system in accordance with the schedule below.

Objective:	Date:
Use of dual units in procurement	09/30/93
Use of metric units in procurement	09/30/94
Use of metric paper sizes	09/30/93
Metric training for headquarters staff	09/30/93

6. *Federal, State, and Local Consultations.* USTTA attends meetings of the Commerce Metric Committee.

7. *Standards.* National and international standards have not impacted USTTA to date.

8. *Private Industry Initiatives.* There are no such initiatives within the scope of this element.

9. *Public-Awareness Initiatives.* There are no such initiatives within the scope of this element.

10. *Employee Training.* There have been no employee training activities within the scope of this element.

XVI. DISCUSSION AND CONCLUSIONS

The Department of Commerce operating unit report submissions show that the transition to metric usage is occurring in Departmental organizations, but that it lacks evenness and consistency of application. All the operating units, particularly those that have significant involvement with physical units of measurement, report a firm commitment to implementing metric usage. However, the different operating units seem to perceive different degrees of ability to overcome impediments to conversion. Whether the issue is converting internal operating procedures or converting products such as contracts, grants, publications, regulations, and technical and business-related data, the units seem to have different views on the amount of control and leadership that they can or should exercise.

The operating unit reports also show that plans for the metric transition are in place. The steps for metric usage implementation are being realistically, if somewhat cautiously, integrated into operational plans for new systems and products. There is evidence of an increasing tempo of progress and that the difficulties being encountered are being treated as temporary barriers rather than as permanent barriers to metric usage.

The Metric Program and the Commerce Metric Committee have expressed a sensitivity to the need to further improve the progress of Departmental metrication. As a result, the November 1991 Department of Commerce Metric Transition Plan is being revised and updated. This is part of a renewed effort to correct some of the current unevenness in the Departmental transition and to define priorities better. Also, the Commerce Metric Committee is working to identify the appropriate degree of proactivity for implementing the metric system in all Departmental program elements. The tempo of progress will accelerate as these efforts mature in the current fiscal year.

XVII.APPENDIX 1. GUIDELINES FOR SUBMISSION OF ANNUAL METRIC REPORTS REQUIRED BY P.L. 100-418, SECTION 5164, METRIC USAGE

These guidelines are for use by department and agency Metric Executives to prepare and provide an approved report to the Congress as part of the department or agency annual budget submission for each fiscal year. The report shall include actions that have been taken, as well as the actions which are planned, to implement fully the metric system of measurement, in accordance with the Metric Conversion Act of 1975 (as amended by the Omnibus Trade and Competitiveness Act of 1988 [P.L. 100-418]).

A complete report is a set of program elements that encompasses the full scope of the department or agency's activities and responsibilities. For each program element, itemized information describes the extent of metric usage in all activities within that element, the progress achieved toward metric, and planned progress. The program elements can be based upon either a functional or programmatic breakdown of the department or agency's activities, as appropriate.

Using these guidelines as a basis, departments and agencies will be able to develop a single annual report; this report will be suitable both as the Annual Metric Report for submission with budget documents and as the submission to the Secretary of Commerce for the Secretary's annual progress report to the President.

For each major program element or function of the department or agency, please provide the following information, according to the listed categories. For items 4 through 10, narratives should include achievements and planned actions.

1. *Program Element.* Give the name and a brief description of the element. This is the functional or programmatic element for which all the information in items 2 through 10 applies. The elements may be defined in a manner that is most suitable to the particular structure of the department or agency.

2. *Supporting Activities.* List primary activities that support the execution of the program element. Include as appropriate procurements, grants, publications, public affairs activities, budgetary and legislative programs, data systems, construction, logistics, and other activities and outputs that are affected by the Executieve Order. Such activities include all programs and functions related to trade, industry, and commerce.

3. *Measurement Sensitivity.* State whether any activities within the program element (including the supporting activities) are measurement sensitive. An element is considered measurement sensitive if it includes any activities that use or generate numerical data having units of physical measurement (e.g., pounds, bushels, miles, kilometers, liters, acres, etc.)

4. *Conversion Status and Sensitivity.* State whether the program element activities are already using only metric units; are using metric and non-metric (dual) units; to be converted to using metric units; or are not to be converted to using metric units. Describe progress toward increased use of metric units. Include information on actions planned, in accordance with the department or agency Metric Transition Plan if appropriate. Explain whether conversions will be "hard" metric conversions, "soft" conversions, or involve the use of dual units. If the

element is not to be converted to using metric units, explain in terms of the exceptions stated in the Executive Order.

5. *Transition Timetable.* Describe the timetable and steps for replacing items generated and consumed by the program element with items using metric units. The description should correspond to the Metric Transition Plan where appropriate.

6. *Federal, State, and Local Consultations.* Describe any interactions with other Federal agencies and with state and local governments that involve the transition of the program element activities to metric usage.

7. *Standards.* Describe any impact of national or international standards and standards activities on the program element's metric transition. Conversely, describe any impact of the program element activities on standards and standards activities.

8. *Private Industry Initiatives.* Describe any initiatives, within the scope of the program element, to work with industry to effect a metric transition or facilitate production of metric items. Include initiatives to assist industrial firms, especially small businesses, in their metric transition efforts.

9. *Public-Awareness Initiatives.* Describe any initiatives, within the scope of the program element, to increase understanding of the metric system of units in the general public. Initiatives may include awareness building, education, training, and other similar activities.

10. *Employee Training.* Describe any employee training activities within the program element.

DEPARTMENT OF COMMERCE

General Administration

FY 1994
Congressional Submission

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Exhibit 1

Budget Estimates, Fiscal Year 1994
President's Submission

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Exhibit 2

U.S. DEPARTMENT OF COMMERCE

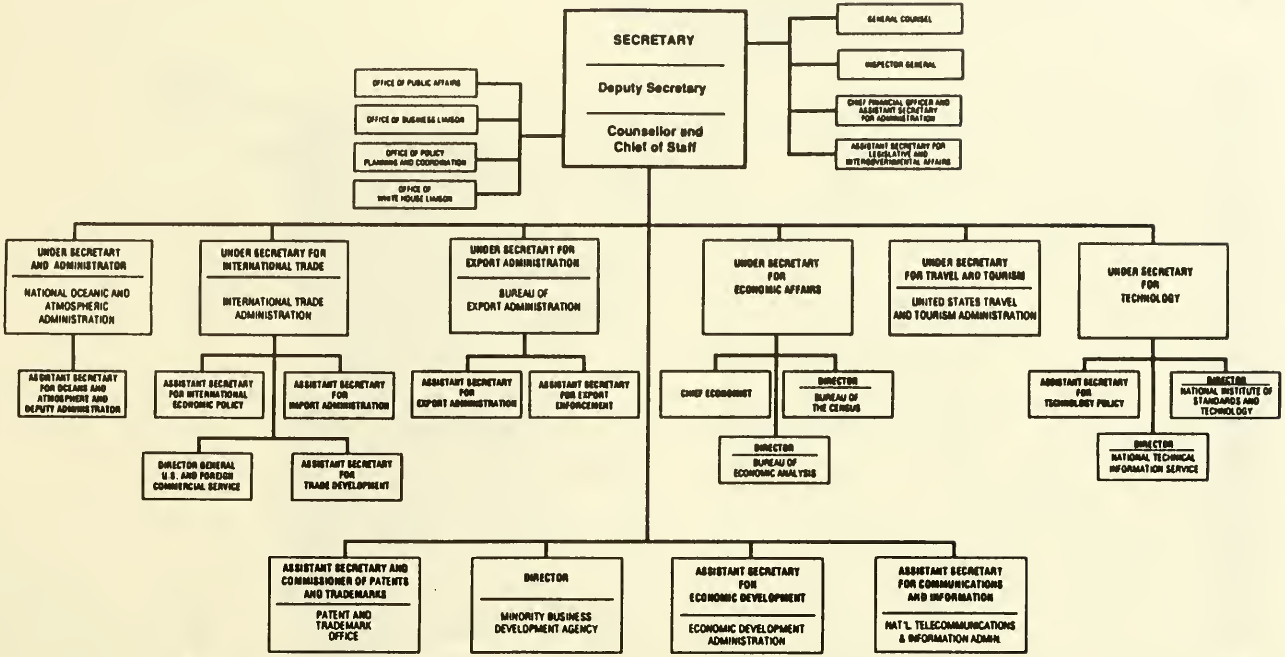
SECRETARY
Deputy Secretary
Counsellor and Chief of Staff
OFFICE OF PUBLIC AFFAIRS
OFFICE OF BUSINESS LIAISON
OFFICE OF POLICY PLANNING AND COORDINATION
OFFICE OF WHITE HOUSE LIAISON
GENERAL COUNSEL
INSPECTOR GENERAL
CHIEF FINANCIAL OFFICER AND ASSISTANT SECRETARY FOR ADMINISTRATION
ASSISTANT SECRETARY FOR LEGISLATIVE AND INTERGOVERNMENTAL AFFAIRS
UNDER SECRETARY AND ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE AND DEPUTY ADMINISTRATOR
UNDER SECRETARY FOR INTERNATIONAL TRADE
INTERNATIONAL TRADE ADMINISTRATION
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
ASSISTANT SECRETARY FOR IMPORT ADMINISTRATION
DIRECTOR GENERAL U.S. AND FOREIGN COMMERCIAL SERVICE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
UNDER SECRETARY FOR EXPORT ADMINISTRATION
BUREAU OF EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ENFORCEMENT
UNDER SECRETARY FOR ECONOMIC AFFAIRS
CHIEF ECONOMIST
DIRECTOR
BUREAU OF THE CENSUS
DIRECTOR
BUREAU OF ECONOMIC ANALYSIS
UNDER SECRETARY FOR TRAVEL AND TOURISM
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
UNDER SECRETARY FOR TECHNOLOGY
ASSISTANT SECRETARY FOR TECHNOLOGY POLICY
DIRECTOR
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
PATENT AND TRADEMARK OFFICE
DIRECTOR
MINORITY BUSINESS DEVELOPMENT AGENCY
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
ECONOMIC DEVELOPMENT ADMINISTRATION
ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION
NAT'L TELECOMMUNICATIONS & INFORMATION ADMIN.

Exhibit 3

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION
BUDGET ESTIMATES FOR FISCAL YEAR 1994
PRESIDENT'S SUBMISSION

GENERAL STATEMENT

The Department of Commerce has the mission of stimulating and strengthening the partnership between government and business in America. By participating fully in efforts to change the nature and recent course of the nation's economy, the Department seeks to be at the forefront of supporting the economic recovery, creating jobs, and encouraging long-term investment. To accomplish this, Commerce is stressing programs to help build public-private partnerships that can find and develop new businesses and trade opportunities.

The Department of Commerce fully supports the President in his efforts to lead the nation in regaining our position of world technological leadership. Commerce's uniquely business and industry-related programs can help realize the priority goals of the President in the areas of trade, technology, telecommunications networks and infrastructure, environmental infrastructure, economic development, and minority business.

The specific functions and programs of the Department that make up these broad activities are authorized by the Department's Organic Act (Act of February 14, 1903 Stat. 825) and by other legislation. They also include responsibilities transferred from other agencies by Presidential Reorganization Plans, as well as responsibilities assigned to the Secretary of Commerce by Executive Order or other actions of the President. The general administration of the functions and authorities of the Department is vested in the Secretary of Commerce. The Office of the Inspector General appropriation is located within the General Administration as a result of their overall Departmental responsibilities. Overall policy direction of the operating bureaus is exercised through the Secretary, the Deputy Secretary, and the various Secretarial officers.

(Dollar amounts in thousands)

Appropriation		1993 Currently Available Personnel	1993 Currently Available Amount	1994 Estimate Personnel	1994 Estimate Amount	Inc. (+) or Dec. (-) Personnel	Inc. (+) or Dec. (-) Amount
Salaries and expenses.	Pos./Appr.	340	$31,712	367	$38,042	+27	+$6,330
	FTE	311		334		+23	
Office of Inspector General. . . .	Pos./Appr.	214	15,805	214	18,381	+0	+2,576
	FTE	199		201		+2	
Total, General Administration .	Pos./Appr.	554	47,517	581	56,423	+27	+8,906
	FTE	510		535		+25	

General Administration is requesting program increases in both Salaries and Expenses and the Office of Inspector General. The Salaries and Expenses increases are as follows: An increase of $2,350,000 and no FTE for "Financial Management Improvement" to create the foundation for a viable Departmental financial management program; $2,000,000 and 16 FTE is for "Management Enhancement" to enhance the policy and management oversight functions in the Department; and $650,000 and no FTE to cover the Department's share of constructing a tunnel connecting the Herbert C. Hoover Building and the Federal Triangle Building . The Office of Inspector General is requesting an increase of $2,000,000 and no FTE to support audit activities associated with the requirements of the Chief Financial Officers Act.

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Exhibit 5

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget	340	32,612	311	32,612
	less: Dec. 17,1992 Proposed transfers not approved (P.L. 102-395)	0	(450)	0	(450)
	Amount Currently Available, 1993	340	32,162	311	32,162
	less: transfers per P.L. 102-395 subsequently implemented	0	(450)	0	(450)
	Appropriation, 1993	340	31,712	311	31,712
GA-9	plus: 1994 adjustments to base	6	1,330	7	1,330
	1994 Base	346	33,042	318	33,042
GA-19	plus: 1994 program changes	21	5,000	16	5,000
	1994 Estimate	367	38,042	334	38,042

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
GA-12	Executive direction	Pos./BA	36	3,549	38	3,987	38	4,082	43	4,830	5	748
		FTE/Obl.	33	3,449	32		32		36		4	
GA-15	Departmental staff services	Pos./BA	319	27,731	302	28,175	308	28,960	324	33,212	16	4,252
		FTE/Obl.	285	27,395	279		286		298		12	
	Direct Obligations	Pos./BA	355	31,280	340	32,162	346	33,042	367	38,042	21	5,000
		FTE/Obl.	318	30,844	311		318		334		16	
	Adjustments to Obligations											
	Recoveries			0		0		0		0		0
	Unobligated Balance, start of year			0		0		0		0		0
	Unobligated balance transferred			0		0		0		0		0
	Unobligated Balance, end of year			0		0		0		0		0
	Unobligated balance expiring			436		0		0		0		0
	Financing from transfers:											
	Transfer from other accounts			0		(450)		0		0		0
	Transfer to other accounts			0		0		0		0		0
	Appropriation			31,280		31,712		33,042		38,042		5,000

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Exhibit 7

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
Total Obligations	73,967	77,104	79,197	84,197	5,000
Offsetting collections from:					
Federal funds	(43,123)	(44,942)	(46,155)	(46,155)	
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year					
Unobligated balance transferred					
Unobligated balance, end of year					
Unobligated balance expiring	436				
	------	------	------	------	------
Budget Authority	31,280	32,162	33,042	38,042	5,000
Financing:					
Transfer from other accounts		-450			
Transfer to other accounts					
	------	------	------	------	------
Appropriation	31,280	31,712	33,042	38,042	5,000

Exhibit 8

Department of Commerce
General Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Transfers:	0	0	0
Adjustment:	0	0	0
Financing:	0	0	0
	-----	-----	------
Other Changes:			
Continuation of 1993 operating level			450
FTE Adjustment	6	7	0
1993 Pay raise			206
Within-grade step increases			252
Civil Service Retirement System (CSRS)			(46)
Federal Employees' Retirement System (FERS)			84
Thrift Savings Plan			45
Federal Insurance Contributions Act (FICA) - OASDI			56
Health insurance			53
Employees Compensation Fund			(7)
Rental payments to GSA			129
Communications, utilities and miscellaneous charges: Other telephone			40
Printing and reproduction			43
Supplies and materials			8
Equipment			17
	-----	-----	------
Subtotal, other changes	6	7	1,330
	-----	-----	------
Total, Adjustments to Base	6	7	1,330

Exhibit 9

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

		FTE	Amount
Other Changes:			
Continuation of 1993 Operating Level		0	450
In order to continue the 1993 operating level as approved by Congress, $450,000 is required.			
FTE Adjustment		7	0
An adjustment of seven FTE is required to support 1993 base program activity.			
Pay raises			206
Full-year cost of 1993 pay increase and related costs. Effective January 1, 1993, Federal employees received a 3.7% pay increase.			
Total cost in 1994 of 1993 pay increase	$825,000		
Less amount funded in 1993	(619,000)		
Less amount absorbed	0		
Amount requested in 1994 to provide full-year cost of 1993 pay increase	$206,000		
Within-grade step increases			252
An increase of $252,307 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.			
Estimated number of within-grade step increases	263		
Step increases not earned due to turnover (19.7% x 263)	52		
Average step above step 1 per separation	2		
Average cost per within-grade step increase	$ 1,375		
Gross cost of scheduled step increases ($1,375 x 263)	361,625		
Less savings due to separations ($1,375 x 52 x 2)	(143,000)		
Subtotal, personnel compensation	218,625		
Benefits	33,682		
Total, adjustment-to-base	$252,307		

		FTE	AMOUNT
Civil Service Retirement System (CSRS)			(46)
The number of employees covered by CSRS continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 59.1 % in 1993 to 55.2 % in 1994. The contribution rate will remain the same.			
FY 1994 ($16,679,000 x .552 x .07)	$ 644,476		
FY 1993 ($16,679,000 x .591 x .07)	690,010		
Total, adjustment-to-base	($ 45,534)		
Federal Employees' Retirement System (FERS)			84
The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 40.9 % in 1993 to 44.8 % in 1994. The contribution rate will remain the same.			
Basic benefit cost in 1994 ($16,679,000 x .448 x .129)	$ 963,913		
Basic benefit cost in 1993 ($16,679,000 x .409 x .129)	880,001		
Total, adjustment-to-base	$ 83,912		
Thrift Savings Plan			45
The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to increase by 0.3%.			
FY 1994 ($16,679,000 x .448 x .037)	$276,471		
FY 1993 ($16,679,000 x .409 x .034)	231,938		
Total, adjustment-to-base	$ 44,533		
Federal Insurance Contributions Act (FICA)-OASDI			56
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2% in 1994.			
OASDI:			
FERS payroll subject to FICA tax in 1994 ($16,679,000 x .448 x .884 x .062)	$409,536		
FERS payroll subject to FICA tax in 1993 ($16,679,000 x .409 x .840 x .062)	355,275		
Subtotal	54,261		
Other payroll subject to FICA tax in 1994 ($515,000 x .884 x .062)	28,226		
Other payroll subject to FICA tax in 1993 ($515,000 x .840 x .062)	26,821		
Subtotal	1,405		
Total, adjustment-to-base	$55,666		
Health insurance			53
Effective January 1992, the contribution to Federal employee's health insurance premiums increased by 8.8 %. Applied against the 1993 estimate of $607,000, the additional amount required is $53,416.			

	FTE	AMOUNT
Employees' Compensation Fund The Employees' Compensation Fund bill for the year ending June 30, 1992 is $6,827 less than the bill for the year ending June 30, 1991. The charges will be reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.		(7)
Rental payments to GSA The GSA estimates an increase for the 1994 rent payment of $129,000.		129
Communications, utilities and miscellaneous charges The Washington Interagency Telecommunications System (WITS) telephone conversion was installed in the Department, converting the Centex switch to the GSA/WITS switch. The estimated increase in operating cost is $40,000 due to GSA imposed line charges in the Hoover Building.		40
Printing and reproduction GPO has provided an estimated rate increase of 3.7%. This percentage was applied to the 1993 estimate of $1,161,000 to arrive at an increase of $42,957.		43
Supplies and materials Based on the GDP deflator of 2.4%, the cost of supplies and materials is expected to increase by $7,584 from the 1993 estimate of $316,000.		8
Equipment Based on the GDP deflator of 2.4%, the cost of equipment is expected to increase by $16,824 from the 1993 estimate of $701,000.		17
Total	7	$1,330

Exhibit 10

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Executive Direction

Subactivity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Secretary	Pos./BA	10	1,260	10	1,371	10	1,409	15	2,157	5	748
	FTE/Obl.	10	1,302	8		8		12		4	
Deputy Secretary	Pos./BA	9	832	9	908	9	928	9	928	0	0
	FTE/Obl.	6	715	7		7		7		0	
Executive Secretariat	Pos./BA	9	647	11	805	11	825	11	825	0	0
	FTE/Obl.	11	683	10		10		10		0	
Chief Financial Officer and Assistant Secretary for Administration	Pos./BA	8	810	8	903	8	920	8	920	0	0
	FTE/Obl.	6	749	7		7		7		0	
Total, Executive Direction	Pos./BA	36	3,549	38	3,987	38	4,082	43	4,830	5	748
	FTE/Obl.	33	3,449	32		32		36		4	

Exhibit 12

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE: EXECUTIVE DIRECTION

Goals and Objectives

The General Administration (GA) account funds the senior officials and supporting staff responsible for directing the entire Department of Commerce. On a near-term basis, the goals and objectives of the Department are:

- economic stimulus activities to help jump-start the economy immediately;
- long-term investment initiatives for sustaining new economic growth through infrastructure development and private-sector job creation, and:
- savings in federal program costs and staffing.

On a long-term basis, Commerce's goals are addressed through the development and implementation of programs that seek to:

- revitalize America's technology capabilities to make our Nation more fully competitive;
- widen opportunities for economic recovery and investment;
- promote international trade in a global economy by improving the international trade climate for American business and industry;
- improve the quality of government statistical programs;
- improve our capacity to support major growth in patent and trademark needs, and;
- improve the overall Department's capacity to respond to priority requirements.

Base Program FY 1994

This activity provides funding for the Secretary, Deputy Secretary, Executive Secretariat, and the immediate office of the Chief Financial Officer and Assistant Secretary for Administration. These offices are responsible for matters affecting Departmental policy, programs, and functions. This responsibility includes the overall management of the Department of Commerce and the representation of the Administration before the public, the business community, the Congress and other Executive agencies and departments. A summary of the individual offices and their specific areas of responsibility follows:

Secretary	Develops policy, establishes priorities, and provides executive management and overall direction for achieving the goals of the Department of Commerce.
Deputy Secretary	Assists and advises the Secretary on matters affecting the Department, and performs continuing and special duties the Secretary may assign. The Deputy Secretary is charged by law with performing the duties of the Secretary in case of absence, sickness, death or resignation of the Secretary.

Executive Secretariat	Controls incoming Secretarial and Deputy Secretarial correspondence. Advises principal Departmental officials of Secretarial actions affecting their responsibility; and maintains permanent official files for the Secretary and Deputy Secretary.
Chief Financial Officer and Assistant Secretary for Administration	Advises the Secretary on matters of financial and administrative management, oversees the management of senior staff activities and the development of Departmental financial systems. The authority of the Secretary is delegated to the Chief Financial Officer and Assistant Secretary for Administration on financial and administrative management matters including personnel, budget, organization, procurement, administrative services, and environmental compliance.

Exhibit 10

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Departmental Staff Services

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Subactivity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Space Commerce	Pos./BA	5	485	5	485	5	498	5	498	0	0
	FTE/Obl.	4	477	5		5		5		0	
General Counsel	Pos./BA	19	1,632	18	1,677	18	1,726	18	1,726	0	0
	FTE/Obl.	15	1,631	17		17		17		0	
Legislative and Intergovernmental Affairs	Pos./BA	22	1,300	21	1,829	21	1,874	21	1,874	0	0
	FTE/Obl.	16	1,084	18		18		18		0	
Public Affairs	Pos./BA	6	1,019	6	871	6	893	6	893	0	0
	FTE/Obl.	11	1,092	6		6		6		0	
Business Liaison	Pos./BA	11	812	11	957	11	984	11	984	0	0
	FTE/Obl.	9	761	11		11		11		0	
Consumer Affairs	Pos./BA	3	468	3	329	3	337	3	337	0	0
	FTE/Obl.	4	510	3		3		3		0	
Director for Federal Assistance and Management Support	Pos./BA	22	1,784	21	1,837	21	1,889	27	2,352	6	463
	FTE/Obl.	18	1,668	20		21		25		4	

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Departmental Staff Services

Subactivity:		1992 Actual Personnel	1992 Actual Amount	1993 Currently Available Personnel	1993 Currently Available Amount	1994 Base Personnel	1994 Base Amount	1994 Estimate Personnel	1994 Estimate Amount	Increase/ (Decrease) Over 1994 Base Personnel	Increase/ (Decrease) Over 1994 Base Amount
Director for Financial Management	Pos./BA	20	2,041	20	2,022	20	2,084	20	4,434	0	2,350
	FTE/Obl.	20	2,152	20		20		20		0	
Director for Information Resources Management	Pos./BA	26	2,435	25	2,394	25	2,464	25	2,464	0	0
	FTE/Obl.	25	2,535	22		22		22		0	0
Director for Human Resources Management	Pos./BA	45	3,548	42	3,483	44	3,584	44	3,584	0	0
	FTE/Obl.	37	3,446	40		42		42		0	
Director of Civil Rights	Pos./BA	15	1,157	15	1,267	15	1,304	15	1,304	0	0
	FTE/Obl.	15	1,265	14		14		14		0	
Director for Budget, Planning and Organization	Pos./BA	71	5,461	65	5,745	67	5,919	77	6,708	10	789
	FTE/Obl.	63	5,733	57		59		67		8	
Director for Procurement and Administrative Services	Pos./BA	54	5,389	50	5,279	52	5,404	52	6,054	0	650
	FTE/Obl.	48	5,041	44		48		48		0	
Total, Departmental Staff Services	Pos./BA	319	27,731	302	28,175	308	28,960	324	33,212	16	4,252
	FTE/Obl.	285	27,395	279		286		298		12	

Exhibit 12

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE: DEPARTMENTAL STAFF SERVICES

Goals and Objectives

GOALS: Departmental Staff Services is committed to continual enhancement of management at the Department of Commerce and improvement of products and services provided to the public by the promulgation of policies and procedures promoting Total Quality Management among all employees in the Department.

OBJECTIVES: In carrying out the goals the Departmental Staff Services improves financial management operations and practices throughout the Department; enhances and maintains a Departmental financial system; plans, develops and implements personnel policies and procedures responsive to the changing needs of the Department; insures Departmental compliance to the spirit and intent of civil rights legislation and an equal employment opportunity workplace; reviews laws and regulations to promote and ensure private sector competitiveness; implements the Federal work space reduction program; encourages the automation of services and information to more effectively and efficiently serve clients; upgrades and integrates Departmental administrative systems; and continually reviews and improves policies and procedures designed to improve the delivery of services throughout the Department.

Base Program FY 1994

This activity provides policy and administrative guidance to the Department. Through such assistance, the Secretary plans, supervises, and directs the full resources and programs of the entire Department and executes his obligations under law. Collectively, the offices ensure coordination among the bureaus' interrelated programs and establish Departmental administrative policies and procedures. A summary of the individual offices and their specific areas of responsibility follows:

Space Commerce	Provides advice and counsel for promoting economic conditions that foster commercial space development and provides assistance in coordinating the Department's activities related to the commercial space industry, encouraging private sector investment in space.
General Counsel	Performs as the chief legal office of the Department, recommends changes to modernize domestic statutes to reflect the changing nature of the world economy; develops Departmental legislative and regulatory programs; contributes to policy development and related legislative initiatives involving antitrust laws which serve to increase the competitiveness of U.S. firms; and coordinates the Department's involvement in other Federal agencies' regulations that may impair U.S. industry growth and competitiveness or have unforeseen economic consequences. Represents the Department in legal proceedings before regulatory commissions, independent commissions, boards, and courts.
Legislative and Intergovernmental Affairs	Formulates Departmental policy on matters concerning Congressional, state and local officials; advises officials of the Department's policies and programs, particularly in the areas of trade, product liability, foreign corrupt practices, communications and tort reform; and oversees the policy and planning functions of all bureau legislative liaison offices. This office acts as liaison between state, county and municipal governments and their associations in matters of information requests and assistance regarding Departmental programs.
Public Affairs	Plans, develops, and implements Departmentwide public information programs to support Departmental priorities and to meet the needs of the Departmental bureaus; Prepares and issues press releases and broadcasting materials; Conducts public relations activities; acts as liaison to promote consistency and coordination between the Department, Executive Branch and the private sector on public information activities.
Business Liaison	Performs as the Department's liaison and is the central point of contact to the business community on business needs and concerns. Promotes business involvement in significant Department policy making and program development.

Consumer Affairs	Provides assistance to businesses with consumer relations problems and to consumers with complaints. Informs corporate consumer affairs directors, state and local government consumer agencies, and consumer organizations of Departmental programs and policies; and informs Departmental officials of constituents' positions on Commerce-related issues.
Director for Federal Assistance and Management Support	Formulates, analyzes, coordinates, and implements federal assistance, environmental compliance and occupational safety and health policies Departmentwide. Administers implementation of the Freedom of Information Act, Privacy Act, OMB Circular A-76, travel management and services, and records and forms management Departmentwide. Oversees the development and execution of the budget for General Administration. Oversees Advisory Committees and the Advisory and Assistance Services Review Program.
Director for Financial Management	Ensures Departmental compliance with the requirements of the CFO Act of 1990, OMB financial related circulars and directives, GAO policies and procedures, and Congressional legislation. Remedies deficiencies identified by the Office of Inspector General. Promulgates and coordinates Departmental financial policy to implement consistent guidelines and practices throughout the Department. Plans and develops an integrated Departmental financial management system and oversees the operation of all automated financial management systems.
Director for Information Resources Management	Plans, develops, implements and evaluates policies and procedures related to information systems for the Department including: developing policies on information resources and computer and telecommunications technology; overseeing the Department's major information systems; implementing and administering the integration of the Department's administrative and programmatic management information systems; and overseeing the Department's central computer facility.
Director for Human Resources Management	Plans, develops and coordinates Departmental policies, programs, and activities for human resources management and administration including: executive recruitment and placement, job classification, payroll support and administration, incentive awards, training and development, employee and labor relations, unemployment and workers compensation, employee benefits, drug testing, and evaluation of personnel management. Evaluates bureau personnel programs for conformance with laws, regulations, and Departmental policies.
Director of Civil Rights	Provides Departmentwide leadership, develops policies and directs programs in support of civil rights including: providing policy and program oversight for the civil rights responsibilities of the Department, operating an in-house equal employment opportunity program and insuring Departmental program operation compliance with established policies.
Director for Budget, Planning and Organization	Advises senior management on the Federal budget process and provides Departmental guidance to bureaus on budget formulation and execution; monitors operating unit compliance with legal and regulatory requirements of the budget process; and maintains liaison with OMB and Congress on the Department's budget request. Advises principal Departmental officials concerning long-range planning, efficient utilization and distribution of resources, implementation of major Departmental goals and assessment of program operations. Also provides a review of bureau operations, Department programs and use of the Management-By-Objectives system. Leads total quality management initiatives and provides organizational review, internal control oversight, audit follow-up and GAO liaison.
Director for Procurement and Administrative Services	Provides Departmental administrative support services including: promptly publishing the Commerce Business Daily; planning, developing and implementing policies and procedures for the acquisition of materials, supplies, equipment and services through procurement and contracting processes; developing and implementing policies and procedures and performing oversight in support of procurement and administrative services; implementing management information systems in procurement, personal and real property; managing work space; providing guidance and supervision of the Small and Disadvantaged Business Utilization program; and administering the Department's national security and emergency preparedness programs.

Exhibit 13

Department of Commerce
General Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Director for Financial Management	Pos./BA	20	$2,084	20	$4,434	0	$2,350
	FTE/Obl.	20		20		0	

FINANCIAL MANAGEMENT IMPROVEMENT (+2,350)

Program Description

This requested program increase of $2,350,000 is urgently needed to begin development of a Commerce core financial system. This new system will be designed to directly support program managers and executives throughout the Department. It will replace eight primary accounting systems and numerous unofficial "cuff record" systems, and thereby remedy long-standing financial systems deficiencies and related internal control weaknesses. In FY 1994 the Department will specify, make and test all needed enhancements and modifications. The Department will also evaluate the alternatives available to it for its subsidiary and program financial systems, then specify, build and test interfaces between the selected systems and the core financial system. The Department established an implementation center in FY 1993. This center will be used to develop and execute comprehensive implementation plans for the Commerce core financial system and integrate it with the related set of subsidiary/program financial systems.

Program Justification

Our current financial management systems have been placed on the Government's list of high risk areas. Most of the Department's financial management systems rely on batch processing and have no interactive on-line capabilities for transaction processing or budget monitoring. This makes it difficult to provide timely and accurate responses to Congressional and other inquiries for financial data/information. The Department's present financial management systems are collections of non-integrated systems that have evolved around accounting systems developed in the 1960's and 1970's. They have been "patched" over the years, are error prone, and have not kept pace with changing requirements and technology. Functional and internal control weaknesses have been reported frequently by the Commerce Inspector General. These weaknesses have been addressed by developing numerous stand-alone subsidiary systems. These systems are extremely difficult and expensive to maintain. In fact, some accounting systems can no longer be changed because of the extremely poor condition of their computer programs and documentation. They have long since passed the end of their life cycles--normally 10-15 years.

The Department's program managers and executives do not have the reliable, up-to-date financial and performance data they need to make sound, timely management decisions. They are forced to make decisions using information pulled together from a variety of non-integrated systems often managed by different organizations with conflicting financial data. This puts the proper financial management of Commerce programs at risk.

The Department's financial management functions continue to be performed outside the various programs and largely after the fact. The required Commerce core financial system must be pursued as an orderly, sustained multi-year development and implementation effort. The selected system will be a modern financial management system, one specifically designed to provide comprehensive support to Commerce's program managers and executives. All of Commerce's bureaus fully support this critical initiative.

In FY 1991 a Commerce-wide project team documented the functional, operational and technical requirements to be met by a core financial system. This team also identified the baseline system alternatives available to the Department for pursuing the core financial system. In FY 1992 the team began the analysis of these alternatives. During FY 1993 the Department will choose a baseline core financial system and systematically evaluate this baseline system against detailed Commerce functional, operational and technical requirements. These evaluations will identify areas where the system will need to be enhanced, or simply modified, to meet Commerce requirements.

Without this program increase, individual Commerce bureaus will continue making piecemeal improvements to their existing outdated financial systems. These multiple initiatives would represent short-term fixes, perpetuate financial system and internal control deficiencies, and cost more than a coherent solution--the implementation of a core financial system.

Exhibit 15

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: DEPARTMENTAL STAFF SERVICES
Subactivity: Director for Financial Management
Program change: Financial Management Improvement

	Object Class	1994 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	2,350
26	Supplies and materials	0
31	Equipment	0
99	Total obligations	2,350

Exhibit 13

Department of Commerce
General Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction..................................	Pos./BA	38	$4,082	43	$4,830	5	$748
	FTE/Obl.	32		38		6	
Departmental Staff Services..........................	Pos./BA	308	28,960	324	30,212	16	1,252
	FTE/Obl.	286		298		12	

MANAGEMENT ENHANCEMENT (+2,000)

Program Description

This requested program increase of $2,000,000 will accomplish several related but distinct analytical and management oversight and enhancement initiatives in such areas as program evaluation, performance measurement, grants management, major automated systems planning and acquisition, environmental compliance, and will invigorate policy/executive secretariat functions.

Program Justification

The Secretary will enhance his capacity to develop, implement, and coordinate policies and selected initiatives with particular emphasis on those that cut across organizational lines in the Department, involve other government agencies or involve the private sector. This effort includes providing consistent, coherent information and guidance on policy matters to Departmental operating organizations and developing practical strategies and plans to ensure that policy initiatives are implemented appropriately. Existing Departmental programs will have their policy goals and objectives examined for their consistency with the administration's priorities. The administration's goal of deficit control through cost savings and productivity improvement makes it imperative to scrutinize program outputs and accomplishments with particular emphasis on efficiency and economy. The examination will establish productivity and performance measures to permit comparative evaluation among programs. The evaluative measurements developed will be integrated with the Department's ongoing budget and management review processes. The Department will initiate activities to manage planned increases in EDA, NTIA and NIST Departmental grant programs; provide an interactive Departmental environmental compliance program including on site audits; and enhance business liaison responsibilities reaching out to constituents in the private sector providing for their effective participation. The increased productivity and improved private sector participation will ensure a strong, growing, healthy, job-producing economy.

Exhibit 14

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive direction / Departmental staff services
Subactivity: Secretary / Dir. for Federal Assistance and Management Support/ Dir. for Budget, Planning and Organization

Program change: Management Enhancement

Title:	Grade	Number	Annual Salary	Total Salaries
	-----	------	------	--------
Senior Advisor	SES-4	1	107,300	107,300
Senior Advisor	SES-3	1	101,800	101,800
Special Assistant	GS-15	2	66,609	133,218
Special Assistant	GS-14	1	56,627	56,627
Grant Specialist	GS-14	1	56,627	56,627
Environmental Specialist	GS-14	1	56,627	56,627
Program Analyst	GS-14	1	56,627	56,627
Budget Analyst	GS-14	1	56,627	56,627
Grant Specialist	GS-13	2	47,920	95,840
Program Analyst	GS-13	2	47,920	95,840
Budget Analyst	GS-13	1	47,920	47,920
Program Analyst	GS-12	2	40,298	80,596
Budget Analyst	GS-12	1	40,298	40,298
Clerical	GS- 9	2	27,789	55,578
Secretary	GS- 7	2	23,474	46,948
		---		--------
Total		21		1,088,473
Less lapse (24.9%)		(5)		(271,030)
		----		--------
Total full-time permanent (FTE)		16		817,443

Exhibit 14

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive direction / Departmental staff services
Subactivity: Secretary / Dir. for Federal Assistance and Management Support/ Dir. for Budget, Planning and Organization

Program change: Management Enhancement

Title:

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	16
Other than full-time permanent	0
Total	16
Authorized Positions:	
Full-time permanent	21
Other than full-time permanent	0
Total	21

Exhibit 15

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Executive direction / Departmental staff services
Subactivity: Secretary / Dir. for Federal Assistance and Management Support/ Dir. for Budget, Planning and Organization

Program change: Management Enhancement

	Object Class	1994 Increase
11	Personnel compensation	
11.1	Full-time permanent	$817
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	817
12.1	Civilian personnel benefits	236
21	Travel and transportation of persons	36
22	Transportation of things	0
23.1	Rental payments to GSA	75
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	24
24	Printing and reproduction	16
25	Other services	740
26	Supplies and materials	24
31	Equipment	32
99	Total obligations	2,000

Exhibit 13

Department of Commerce
General Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Director for Procurement and Administrative Services. . .	Pos./BA	52	$5,404	52	$6,054	0	$650
	FTE/Obl.	48		48		0	

HCHB Tunnel

$650,000 is requested in 1994 to cover the Department's share of the construction of an underground connecting tunnel between the Herbert C. Hoover Building (HCHB) and the Federal Triangle Building (FTB).

The Pennsylvania Avenue Development Corporation has included a connecting tunnel between the Department of Commerce's (DOC) headquarters building and the FTB in the Project's site prospectus. The tunnel will directly support the DOC goal to increase America's Competitiveness in the World Market by improving public access to DOC resources. The Department will have a store-front presence in the FTB itself, while the great bulk of trade promotion and licensing functions will be housed in the HCHB. The tunnel will provide a safe pedestrian connection between the HCHB and the FTB which will facilitate the anticipated heavy traffic between the two buildings and will allow the Department to receive large tractor trailer shipments which cannot presently be accommodated at the HCHB.

Exhibit 15

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Departmental Staff Services
Subactivity: Director for Procurement and Administrative Services
Program change: HCHB Tunnel

	Object Class	1994 Increase
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Land and Structure	650
99	Total obligations	650

Exhibit 16

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
11	Personnel compensation					
11.1	Full-time permanent	16,130	16,561	16,927	17,744	817
11.3	Other than full-time permanent	373	415	415	415	0
11.5	Other personnel compensation	373	392	392	392	0
11.9	Total personnel compensation	16,876	17,368	17,734	18,551	817
12.1	Civilian personnel benefits	2,993	3,191	3,432	3,668	236
13	Unemployment Compensation	9	0	0	0	0
21	Travel and transportation of persons	318	435	435	471	36
22	Transportation of things	9	10	10	10	0
23.1	Rental payments to GSA	3,688	3,924	4,041	4,116	75
23.2	Rental payments to others	9	70	82	82	0
23.3	Communications, utilities and miscellaneous charges	406	434	474	498	24
24	Printing and reproduction	1,081	1,161	1,204	1,220	16
25	Other services	4,482	4,552	4,588	7,678	3,090
26	Supplies and materials	299	316	324	348	24
31	Equipment	673	701	718	750	32
32	Land and Structures	0	0	0	650	650
43	Interest & dividends	1	0	0	0	0
99	Total Obligations	30,844	32,162	33,042	38,042	5,000
	Less prior year recoveries			0	0	
	Total Budget Authority			33,042	38,042	5,000

Exhibit 16

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
Personnel Data					
Full-Time Equivalent Employment:					
Full-time permanent	303	296	303	319	16
Other than full-time permanent	15	15	15	15	0
Total	318	311	318	334	16
Authorized Positions:					
Full-time permanent	335	320	326	347	21
Other than full-time permanent	20	20	20	20	0
Total	355	340	346	367	21

Exhibit 17

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	0	745	745	0
	Senior executive service	0	2,957	3,114	157
	General schedule	366	13,225	13,885	660
	Subtotal	366	16,927	17,744	817
11.3	Other than full-time permanent				
	General schedule	0	415	415	0
	Subtotal	0	415	415	0
11.5	Other personnel compensation				
	Overtime	0	72	72	0
	SES performance awards	0	170	170	0
	Cash awards	0	150	150	0
	Subtotal	0	392	392	0
11.9	Total personnel compensation	366	17,734	18,551	817

Exhibit 17

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits				
	Civil Service Retirement System	(32)	781	781	0
	Federal Employees' Retirement System	105	775	881	106
	Thrift Savings Plan	51	221	237	16
	Federal Insurance Contribution Act	70	673	736	63
	Health Insurance	53	660	696	36
	Life Insurance	1	47	62	15
	Employees' Compensation Fund	(7)	275	275	0
	Subtotal	241	3,432	3,668	236
21	Travel and transportation of persons				
	Common carrier	0	240	261	21
	Mileage	0	13	14	1
	Per diem/actual	0	138	148	10
	Vehicular	0	31	34	3
	Other	0	13	14	1
	Subtotal	0	435	471	36
22	Transportation of things	0	10	10	0
23.1	Rental payments to GSA	117	4,041	4,116	75
23.2	Rental payments to others	12	82	82	0

Exhibit 17

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
23.3	Commun., util., and misc. charges				
	Rental of ADP equipment	0	1	1	0
	Rental of office copying equipment	0	2	2	0
	Other equipment rental	0	2	2	0
	Federal Telecommunications System	0	107	116	9
	Other telecommunications services	40	242	253	11
	Postal Service by USPS	0	98	102	4
	Other	0	22	22	0
	Subtotal	40	474	498	24
24	Printing and reproduction				
	Publications	0	109	114	5
	Other	43	1,095	1,106	11
	Subtotal	43	1,204	1,220	16
25	Other services				
	Training:				
	University	0	4	4	0
	Office of Personnel Management	0	28	36	8
	Other	0	43	51	8
	Maintenance of equipment	0	63	63	0
	GSA reimbursable services	0	60	60	0
	ADP services	0	10	10	0
	Telecommunications services	0	2	2	0
	Payments to GA, WCF	36	3,622	3,846	224
	Other Federal Agencies	0	292	292	0
	Contract	0	0	2,850	2,850
	Other	450	464	464	0
	Subtotal	486	4,588	7,678	3,090

Exhibit 17

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
26	Supplies and materials				
	Office supplies	8	251	270	19
	ADP supplies	0	41	46	5
	Other	0	32	32	0
	Subtotal	8	324	348	24
31	Equipment				
	Office machines and equipment	17	580	612	32
	ADP hardware	0	50	50	0
	ADP software	0	60	60	0
	Other	0	28	28	0
	Subtotal	17	718	750	32
32	Land and Structures	0	0	650	650
99	Total Obligations	1,330	33,042	38,042	5,000
	Less prior year recoveries	0	0	0	
	Total Budget Authority	1,330	33,042	38,042	5,000

Exhibit 31

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Salaries and Expenses
APPROPRIATION SUMMARY STATEMENT

Appropriation: Salaries and Expenses

The appropriation "Salaries and Expenses" provides for the executive direction of the Department of Commerce; for the principal support to the Secretary in formulating policy and providing advice to the President; and for Departmental staff services necessary for management and administration, including such functions as budget, planning, program evaluation, Congressional relations, public information, legal services, organization and management studies, human resources, financial systems, publications, and security.

The budget request for "Salaries and Expenses" for 1994 is $38,042,000, which includes adjustments to base of +$1,330,000 and program increases of +$5,000,000.

Exhibit 33

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Salaries and Expenses
Appropriation Language and Code Citations

Appropriation: Salaries and Expenses

1. For expenses necessary for the general administration of the Department of Commerce provided for by law,

15 U.S.C. 1501

15 U.S.C. 1501 provides that: "There shall be...the Department of Commerce, and a Secretary of Commerce, who shall be the head thereof..." The sections which follow 15 U.S.C. 1501 establish various Assistant Secretaries and define general powers and duties of the Department.

2. Including not to exceed $3,000 for official entertainment, $38,042,000.

No specific authority

5 U.S.C. 5536 prohibits additional pay or allowance to employees unless the appropriation therefore specifically states that it is for the additional pay or allowance.

Exhibit 34

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Salaries and Expenses
CONSULTING AND RELATED SERVICES
(Obligations in Thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$68	$50	$50
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and Support services for research and development	0	0	0
TOTAL	68	50	50

Human Resources Management experts and consultants are hired on a temporary or intermittent basis to perform highly specialized services that cannot be performed by available personnel, such as:

- o Providing advice and assistance to the Deputy Secretary for a wide range of speechwriting and media related activities.
- o Providing advice and assistance to the Assistant Secretary for Administration on the analysis of critical policy and program issues that concern major administrative management functions of the Department.
- o Providing advice for the public and assistance to the Secretary of Commerce for the formulation of program enhancements for the Public Affairs program.

Exhibit 35

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Salaries and Expenses
PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate	1995 Estimate
Periodicals	$0	$0	$0	$0
Pamphlets	3	2	1	2
Audiovisuals	0	0	0	0
TOTAL	3	2	1	2

Pamphlets

Pursuant to 15 U.S.C. 1519, the Secretary of Commerce must make a report in writing to Congress giving an account of all monies received and disbursed by the Department. He must also describe the work done by the Department in fostering, promoting and developing the foreign and domestic commerce, the mining, manufacturing and fishery industries of the U.S., and make such recommendations as he shall deem necessary for the effective performance of the duties and purposes of the Department. In addition to the description and accomplishments of the Department and its various units, this report includes a directory of key officials, and a summary of employment and financing for the past year.

Exhibit 36

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Salaries and Expenses
AVERAGE GRADES AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Average ES Grade	3.65	3.65	3.65
Average GS/GM Grade	11.66	11.40	11.47
Average GS/GM Salary	$45,628	$46,023	$44,463

Exhibit 2

Organizational Chart

Office of Inspector General

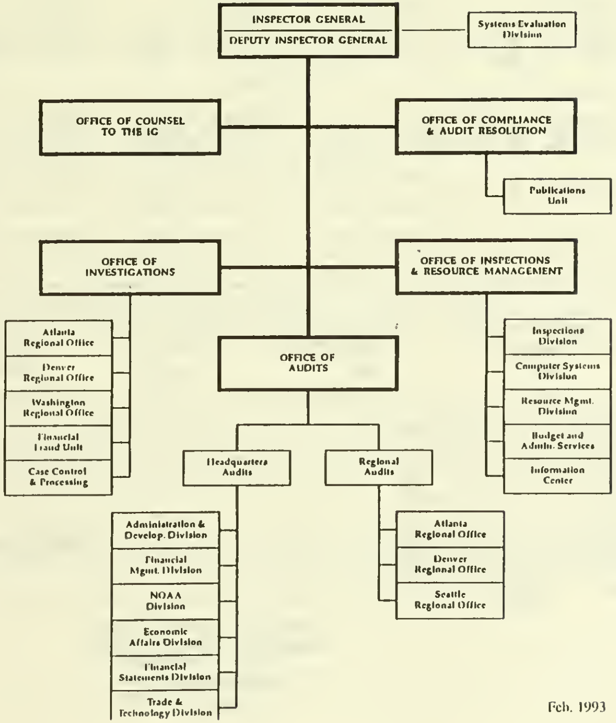

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Exhibit 5

Department of Commerce
General Administration
Working Capital Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	Budget Authority	FTE	Direct Obligations
Amount available for FY 1993 as shown in 1994 President's budget	726		707	65,085
plus: 1994 Adjustments to base	(31)		(31)	(1,478)
1994 Base	695		676	63,607
plus: 1994 Program changes	4		4	1,528
1994 Estimate.	699		680	65,135

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
Comparison by activity		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Departmental Staff Services. .	Pos./BA	536	...	543	...	512	...	512	...	0	0
	FTE/Obl.	484	55,703	528	55,607	497	53,986	497	55,047	0	1,061
General Counsel.	Pos./BA	162	...	161	...	161	...	165	...	4	0
	FTE/Obl.	159	14,781	158	13,474	158	13,598	162	14,065	4	467
Public Affairs	Pos./BA	22	...	22	...	22	...	22	...	0	0
	FTE/Obl.	20	2,027	21	1,908	21	1,927	21	1,927	0	0
Subtotal	Pos./BA	720	0	726	0	695	0	699	0	4	0
	FTE/Obl.	663	72,511	707	70,989	676	69,511	680	71,039	4	1,528
Less Intra-Fund Transfers. .			(7,404)		(5,904)		(5,904)		(5,904)		
Total Requirements			65,107		65,085		63,607		65,135		

Department of Commerce
General Administration
Working Capital Fund

Goals and Objectives

Goals and Objectives: To provide necessary services to clients in the most efficient and effective manner possible consistent with Government-wide and Departmental policy. These services include support in the areas of Human Resources Management, Civil Rights, Federal Assistance and Management Support, Financial Management, Procurement and Administrative Services, Information Resources Management, Administrative Law, General Counsel and Public Affairs.

Base Program

Director for Human Resources Management	Implements Government-wide and Departmental policies, programs and activities in all aspects of human resources management and administration including recruitment and placement, classification, payroll support and administration, incentive awards, training and development, employee and labor relations, unemployment and workers' compensation, employee benefits, health services and drug testing.
Director of Civil Rights	Conducts discrimination complaint investigations and adjudications, provides equal employment program support and affirmative action program support to selected operating units.
Director for Federal Assistance Management Support	Provides budget functions for all appropriations under General Administration. Provides controllership functions for the Department's Working Capital Fund and financial support and guidance Department-wide on matters concerning the Working Capital Fund. Performs federal assistance administrative duties and responsibilities to ensure that federal assistance actions comply with Departmental procedures, provides occupational safety and health programs and provides travel management support for the Department.
Director for Financial Management	Implements policies and procedures for Departmental financial management, provides the management and operation of a primary accounting system for the Office of the Secretary and selected bureaus, and provides consolidated financial reporting.
Director for Procurement and Administrative Services	Implements the Federal work space reduction programs within DOC; implements policies and procedures for programs of physical, information and personnel security; manages programs for consolidating DOC printing and publishing activities, transportation services, directory and distribution functions, and warehousing. Continues improvement of conditions at HCHB for all tenant organizations and implements and coordinates DOC-wide building management responsibilities. Continues implementation of the Small Purchase System, Commerce Procurement Data System, Automated Procurement Data System, CONTRACK, Security Management Information System, Real Estate and Space Management Information Systems (RSMIS), and the Personal Property System.
Director for Information Resources Management	Provides operational computer support to Office of the Secretary components and designated Commerce bureaus and programs including the Export Control Automated Support System, Department-wide administrative systems, Minority Business Development Centers and technical information order processing systems. Upgrades and integrates Departmental Administrative Systems including Management Information, Real and Personal Property, and Procurement systems.
Administrative Law Judge	Conducts legal hearings and adjudication functions Department-wide.

General Counsel	Provides legal advice, guidance and services on matters involving all Departmental programs and components. Supervises the development of the Department's legislative program and continues to improve on the delivery of effective legal services for the growing needs of major programs.
Public Affairs	Promotes public understanding and support of DOC programs, services and consumer issues. Ensures continuity and cost-effective management of DOC public affairs programs. Acts as the primary point of contact on DOC issues for the White House and Federal departments and agencies.

Exhibit 8

Department of Commerce
General Administration
Working Capital Fund
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	POSITIONS	FTE	Amount
Transfers:			
From: "Operations and Administration", Bureau of Export Administration	1	1	25
"Salaries and Expenses", Economic and Statistical Analysis	2	2	101
To: "NTIS Revolving Fund", National Technical Information Service	(34)	(34)	(2,500)
Subtotal, Transfers	(31)	(31)	(2,374)
Adjustments:			
Administrative Expenses	0	0	(746)
Other changes:			
1993 Pay Raise	0	0	394
Within-grade step increases	0	0	389
Civil Service Retirement System (CSRS)	0	0	(73)
Federal Employees Retirement System (FERS)	0	0	135
Thrift Savings Plan	0	0	21
Federal Insurance Contributions Act (FICA)-OASDI	0	0	75
Health insurance	0	0	111
Rental payments to GSA	0	0	183
Printing and reproduction	0	0	37
Other services:			
National Finance Center	0	0	289
Health Services	0	0	81
Subtotal, Other changes	0	0	1,642
Total, Adjustments to Base	(31)	(31)	(1,478)

Exhibit 9

Department of Commerce
General Administration
Working Capital Fund
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

		FTE	Amount	FTE	Amount
President's Budget, 1993				707	65,085
Transfers:					
From "Operations and Administration", Bureau of Export Administration The Bureau of Export Administration transfers 1 FTE to the Office of Procurement and Administrative Services in the General Administration "Working Capital Fund" to provide for transportation services. The Working Capital Fund billings will reflect the increased cost of $25,000.		1	25		
From "Salaries and Expenses", Economic and Statistical Analysis Economic and Statistical Analysis transfers 2 FTE to the Office of Human Resources Management in the General Administration "Working Capital Fund" to provide personnel operations services. The Working Capital Fund billings will reflect the increased cost of $101,000.		2	101		
To "NTIS Revolving Fund", National Technical Information Service The micrographic services function and support staff are transferred from the "Working Capital Fund", General Administration to "NTIS Revolving Fund", National Technical Information Service (NTIS). Thirty-four (34) FTE will be transferred with a subsequent decrease in Working Capital Fund billings to NTIS of $2,500,000.		(34)	(2,500)		
Subtotal, Transfers				(31)	(2,374)
Adjustments:					
Administrative Expenses Pursuant to the Executive Order on Deficit Control and Productivity Improvement in the Administration of the Federal Government, there will be a savings of $746,000 in 1994 for administrative expenses.				...	(746)
Other changes:					
1993 Pay Raise Full-year cost of 1993 pay increase and related costs. Federal employees received a 3.7 percent pay increase effective January 1, 1993.		...	394		
Total cost in 1994 of 1993 pay increase	1,575				
Less amount funded in 1993	1,181				
Less amount absorbed	...				
Amount requested in 1994 to provide full-year cost of 1993 pay increase	394				

		FTE	Amount	FTE	Amount
Within-grade step increases		...	389		

An increase of $388,865 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.

Estimated number of within-grade step increases	431
Step increases not earned due to turnover (19.8% x 431)	85
Average step above step 1 per separation	2
Average cost of within-grade step increase	1,297
Gross cost of scheduled step increases ($1,297 x 431)	559,007
Less: Savings from separations ($1,297 x 85 x 2)	(220,490)
Subtotal, Personnel Compensation	338,517
Personnel Benefits	50,348
Adjustment to Base for 1994	388,865

		FTE	Amount	FTE	Amount
Civil Service Retirement System (CSRS)		...	(73)		

The number of employees covered by the CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System. We estimate the percentage of payroll for employees covered by retirement systems will drop from 59.1 percent for CSRS in 1993 to 55.2 percent in 1994. This will result in a decrease of $73,393 in the cost of CSRS contributions, from $1,112,191 to $1,038,798.

1994 $26,884,000 x .552 x .07	$1,038,798
1993 $26,884,000 x .591 x .07	1,112,191
Adjustment to Base for 1994	(73,393)

		FTE	Amount	FTE	Amount
Federal Employees Retirement System (FERS)		...	135		

The number of employees covered by the FERS will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate the percentage of payroll for eligible employees covered by FERS will rise from 40.9 percent in 1993 to 44.8 percent in 1994.

1994 $26,884,000 x .448 x .129	$1,553,680
1993 $26,884,000 x .409 x .129	1,418,427
Adjustment to base for 1994	135,253

		FTE	Amount	FTE	Amount
Thrift Savings Plan (TSP)		...	21		

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2 percent.

1994 $26,884,000 x .448 x .02	$240,881
1993 $26,884,000 x .409 x .02	219,911
Adjustment to Base for 1994	20,970

		FTE	Amount	FTE	Amount
Federal Insurance Contributions Act (FICA)		...	75		
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2 percent in 1994.					
Regular:					
1994 $26,884,000 x .448 x .9663 x .062	721,565				
1993 $26,884,000 x .409 x .9501 x .062	647,706				
Subtotal	73,859				
Other Salaries:					
1994 $937,000 x .9663 x .062	56,136				
1993 $937,000 x .9501 x .062	55,195				
Subtotal	941				
Adjustment to Base for 1994	74,800				
Health insurance The cost of the U.S. Government's contribution to the Federal employees' health insurance plans increased by 8.6 percent. Against estimated costs of $1,288,070, the increase in the Government's contribution to health benefits is $110,774.		...	111		
Rental payments to GSA GSA has provided a preliminary average increase for 1994 of 3.0 percent. This percentage was applied to the 1993 estimate of $6,116,000 for an increase of $183,480.		...	183		
Printing and reproduction GPO has provided an estimated rate increase of 3.7 percent. This percentage was applied to the 1993 estimate of $992,000 for an increase of $36,704.		...	37		
National Finance Center It is expected that the Department of Agriculture's National Finance Center will increase rates for their Personnel/Payroll system by 7.5 percent. This percentage was applied to the 1993 estimate of $3,847,000 for an increase of $288,525.		...	289		
Health Services The Department of Commerce Health Services contract increased by 9 percent. This percentage was applied to the 1993 estimate of $900,000 for an increase of $81,000.		...	81		
Subtotal, Other changes				...	1,642

	FTE	Amount	FTE	Amount
Program changes:				
Management Training Center	0	(600)		
With the change in OPM billing procedures, the Executive Seminar Center training program will no longer be billed directly to the Department and funded through the WCF. OPM will bill each bureau in the Department directly based on participation.				
Training Programs	0	540		
This increase provides for expansion of training programs, including the establishment of an Executive Forum, Management Excellence Programs, and expanded Clerical and Administrative Skills Development Institute (CASDI) courses. These programs are established and billed based on participation by buresus within the Department. The increase reflects the anticipated usage of the training programs in 1994.				
Security Programs	0	1,000		
This increase reflects the consolidation of billings in the WCF for security background investigations requested by all bureaus in the Department. Previously OPM conducted the security background investigations and billed bureaus directly.				
Warehouse Services	0	121		
The Department is consolidating several warehousing functions including the storage of Department specific forms and excess property. These functions are transferred from the Department of Agriculture to the Working Capital Fund. The Working Capital Fund increase will be offset by reduced billings from the Department of Agriculture for services previously billed directly to the bureaus.				
General Counsel Operations	3	407		
An increase of 3 FTE and $407,000 is necessary to meet the new Office of Government Ethics regulations regarding employee Ethics training and to meet regulations expanding employee coverage for filing confidential Financial Disclosure reports.				
OGC International Trade Administration	1	60		
This increase is for 1 FTE and $60,000 to provide legal support in the areas of International Commerce, the U.S. and Foreign Commercial Service, Import Administration, and provides additional staff in the Department's Ethics and General Law programs. This increase is directly related to program initiatives being presented in the ITA budget submission.				
Subtotal, Program Changes			4	1,528
Total, Adjustments to Base and Program Changes			(27)	50
1994 estimate			680	65,135

Department of Commerce
General Administration
Working Capital Fund
(Dollar amounts in thousands)

	FY 1992		FY 1993		FY 1994	
	FTE	Amount	FTE	Amount	FTE	Amount
Departmental Staff Services:						
Director for Human Resources Management	80	10,556	83	12,748	85	13,223
Director of Civil Rights.	8	870	14	1,002	14	1,009
Director for Federal Assistance and Management Support.	29	1,991	35	2,608	35	2,637
Director for Financial Management	44	4,071	47	3,945	47	3,979
Director for Procurement and Administrative Services.	240	29,284	262	25,430	229	24,259
Director for Information Resources Management	76	8,341	80	9,318	80	9,378
Administrative Law Judge.	7	590	7	556	7	562
Subtotal, Departmental Staff Services	484	55,703	528	55,607	497	55,047
General Counsel	159	14,781	158	13,474	162	14,065
Public Affairs.	20	2,027	21	1,908	21	1,927
Subtotal.	663	72,511	707	70,989	680	71,039
Less Intra-Fund Transfers	...	(7,404)	...	(5,904)	...	(5,904)
Total Requirements.	663	65,107	707	65,085	680	65,135

Department of Commerce
General Administration
Working Capital Fund
Distribution by Bureau
(Dollar amounts in thousands)

	FY 1992	FY 1993	FY 1994
Office of the Secretary	$4,784	$5,086	$5,058
International Trade Administration	11,790	11,483	12,579
Economic Development Administration	2,409	2,920	2,901
National Telecommunications and Information Administration	1,379	1,496	1,486
National Technical Information Service	5,808	5,958	3,565
Bureau of the Census	7,137	7,021	7,475
Economic and Statistical Analysis	2,374	3,143	3,046
U.S. Travel and Tourism Administration	611	760	812
National Oceanic and Atmospheric Administration	11,968	11,334	11,754
National Institute of Standards and Technology	2,118	2,180	2,355
Patent and Trademark Office	4,199	3,645	3,941
Minority Business Development Agency	1,908	2,371	2,381
Bureau of Export Administration	6,072	5,068	5,239
Office of Inspector General	975	1,058	1,126
Technology Administration	782	810	659
Other Agencies	793	752	758
Total	$65,107	$65,085	$65,135

Exhibit 26

Department of Commerce
General Administration
Summary of
SCHEDULE OF PERMANENT POSITIONS

	1992 Actual	1993 Estimate	1994 Estimate
Executive Level I	1	1	1
Executive Level II	1	1	1
Executive Level III	0	0	0
Executive Level IV	5	5	5
Executive Level V	0	0	0
Subtotal	7	7	7
ES-6	4	4	4
ES-5	18	18	18
ES-4	9	9	10
ES-3	4	4	5
ES-2	3	3	3
ES-1	8	8	8
Subtotal	46	46	48
GS-16	1	0	0
GS/GM-15	116	109	112
GS/GM-14	174	162	165
GS/GM-13	204	194	201
GS-12	165	166	171
GS-11	65	66	71
GS-10	4	4	4
GS-9	87	93	95
GS-8	42	44	42
GS-7	121	128	121
GS-6	57	60	60
GS-5	55	57	48
GS-4	61	61	54
GS-3	24	24	23
GS-2	3	4	3
GS-1	3	1	1
Subtotal	1,182	1,173	1,171
Ungraded	80	80	80
	80	80	80
Total Permanent Positions	1,315	1,306	1,306
Unfilled positions, end of year	(187)	0	0
Total permanent employment, end of year	1,128	1,306	1,306

Mr. SKAGGS. Testifying this morning is Gloria Gutierrez, the Acting Assistant Secretary for Administration and Acting Chief Financial Officer for the Department. Welcome and good morning.

Since this is your first time before the subcommittee, you will be delighted to know that we will put your biographical sketch in the record so that the entire world will know all about you. And, Ms. Gutierrez, if you would now please proceed with your statement and then we will have some questions.

[The biographical sketch of Ms. Gutierrez follows:]

BIOGRAPHY OF GLORIA GUTIERREZ

Ms. Gutierrez is currently serving as Deputy Assistant Secretary for Administration for the Department of Commerce.

Ms. Gutierrez was formerly the Executive Vice President and Chief Operating Officer of A.M. Herman & Associates, Inc., a minority-owned corporation headquartered in Washington, D.C. For over 12 years the company specialized in organizational effectiveness and in developing tailor-made, innovative strategies to meet an organization's needs with respect to diversity, multiculturalism, career management, minority/disadvantaged business enterprise, community and public relations, and image enhancement. Ms. Gutierrez was responsible for the overall strategic direction of the company, management of its internal operations, staff, and consultants as well as oversight and monitoring of all the company's projects.

Ms. Gutierrez previously served as Deputy Director of the Woman's Bureau, United States Department of Labor (DOL). In addition to serving as a principal advisor to the Direct or on economic and social concerns of women in the workplace, she was responsible for day-to-day administration of Bureau operations, including the coordination, oversight, and management of Bureau budgets and personnel for the national office and its ten regional field offices. Additionally, Ms. Gutierrez served as a principal adviser to the Secretary of Labor on issues related to Hispanic women workers.

Preceding her appointment to the Labor Department, Ms. Gutierrez had been the Research Analyst and Field Specialist of the Minority Women Employment Program (MWEP). MWEP, placed over a thousand minority women in occupations in private industry where no minority women had been previously. The program was successfully replicated in 10 cities.

Mr. Gutierrez has an undergraduate degree from Texas A&I University and a Masters Degree in Operations Management from the University of Arkansas. She previously served as a Research Associate at the University of Texas and as a high school teacher in Tennessee.

OPENING STATEMENT

Ms. GUTIERREZ. Good morning, Mr. Chairman, and thank you. I am pleased to be here to present the fiscal year 1994 budget request for the Commerce's General Administration, Salaries and Expenses appropriation. With me today is Uriel Gottesman, Director of Budget Operations for General Administration.

We are requesting $38 million and 367 positions for fiscal year 1994. This represents an increase of $6.3 million and 27 positions above the fiscal year 1993 appropriation. Our requested increase consists of $5 million and 21 positions for program increases, and $1.3 million and six positions for adjustments to base.

Before I present the details of our budget request, I would like to discuss the policy framework supporting it. It may seem contradictory that we are requesting program increases totaling $5 million when at the same time the President has ordered reductions in budgets. The Department is complying with this effort.

In 1994, the Department is reducing FTEs by 909 below the 1993 level. In addition, we are taking administrative cuts of $19 million.

The funding we are asking for will allow the Secretary to decide how the Department will restructure the way that we do business.

As Secretary Brown testified to this subcommittee, this administration has made its mission clear. We must change the nature and recent course of our economy. We must focus on long-term growth and opportunity, and we must build public/private partnerships that can find and develop new business and trade opportunities. We must open these opportunities so that we can realize our commitment to put people first.

In order for General Administration to aggressively pursue the President's priorities and establish new policies for Commerce's Federal programs, we have requested additional people and dollar investment in the Salaries and Expenses appropriation.

The first program increase is for the development of the new departmental financial management system. We are requesting $2,350,000 for this program.

OMB has identified the Department's financial systems as a high risk area. Functional and internal control weaknesses in our financial management systems have been reported frequently by the Commerce Inspector General. The Department currently uses eight different primary financial systems. These systems are not responsive to managers, are poorly documented, error-prone, labor intensive, difficult to maintain, inflexible and outdated.

As a result, we have informal information systems supporting financial records that are redundant and often contain duplicative and inconsistent information. With a core system in place, the data that managers would need would be produced on a routine basis.

In fiscal year 1993, we will select the core financial system and establish an implementation center where comprehensive plans will be developed and carried out. During 1994, we will make and test any modifications that we need to make in the core system as well as to the subsidiary systems.

The second program increase is for Management Enhancement. We are requesting $2 million and 21 positions for this program. The increase will enhance the capacity to develop, implement and coordinate policies and selected initiatives, particularly those that cut across organizational lines in the Department, or involve other Government agencies. It will strengthen our capability to provide objective evaluations of program performance, results and impacts.

The increase will provide funds to strengthen and oversee such areas as program evaluation, performance measurement, grants management and major automated systems planning and acquisition. The ability to develop performance measures and to monitor them is necessary in order to meet requirements under the Chief Financial Officers Act. Because of increases in departmental grant programs in EDA, NTIA and NIST, the Office of the Secretary will need to build its capacity to review, process and manage an increased number of grant applications and awards. Also, additional oversight will be placed on areas that have been cited by the Inspector General's Office as high risk areas.

The third program increase covers the Department's share of a tunnel connecting the Herbert C. Hoover building with the Federal Triangle building. We are requesting $650,000 for our share of constructing the tunnel.

The tunnel will provide a direct, weather-protected, safe pedestrian crossing between the Herbert C. Hoover building, the Federal Triangle building and the Federal Triangle Metro station. Additionally, it will allow the Department to receive large tractor trailer shipments which cannot presently be accommodated at the Herbert C. Hoover building.

Lastly, we are requesting adjustments to base of $1,330,000. These adjustments to base cover increases for such items as the last three months of the fiscal year 1993 pay raise, pay-related benefits and GSA rent. These funds are necessary for us to continue operating at the 1993 level.

Mr. Chairman, this concludes my prepared remarks. I will be glad to answer any questions that the committee may have.

[The prepared statement of Ms. Gutierrez follows:]

OPENING STATEMENT BY GLORIA GUTIERREZ
ACTING CHIEF FINANCIAL OFFICER AND
ASSISTANT SECRETARY FOR ADMINISTRATION

BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

April 20, 1993

Good Morning, Mr. Chairman and members of the subcommittee. I am pleased to be here to present the fiscal year 1994 budget request for Commerce's General Administration, Salaries and Expenses appropriation. With me today is Uriel Gottesman, Director of Budget Operations for General Administration.

We are requesting $38 million and 367 positions for fiscal year 1994. This represents an increase of $6.3 million and 27 positions above the fiscal year 1993 appropriation. Our requested increase consists of $5.0 million and 21 positions for program increases and $1.3 million and 6 positions for adjustments to base.

Before I present the details of our budget request, I would like to discuss the policy framework supporting it. It may seem contradictory that we are requesting program increases totaling $5.0 million when at the same time the President has ordered reductions in budgets. The Department is complying with this effort. In 1994, the Department is reducing FTE by 909 below the 1993 level. In addition we are taking administrative cuts of $19 million. We are involved in a delicate balancing act --

sometimes adding resources and programs, such as we have requested in the General Administration budget, that are critical to achieving our larger goal, while cutting back administrative support in ways which will not harm the Department's progress. The funding we are asking for will allow the Secretary to decide how the Department will restructure the way we do business. Although, the benefits of these investments do not appear immediately and may even appear easy to postpone, they have been considered carefully and fit into the Department's overall package of belt tightening and scaling back on government cost.

As Secretary Brown testified to this subcommittee, President Clinton and Vice-President Gore represent a new generation of men and women coming into positions of responsibility in this country with new ideas for the future and new priorities for many Federal Programs. This Administration has made its mission clear -- we must change the nature and the recent course of our economy. We must focus on long-term growth and opportunity. We must build public-private partnerships that can find and develop new business and trade opportunities. We must open these new opportunities so that we may realize our commitment to "put people first". We want to provide a reinvigorated economy and the jobs that it will produce. The Department of Commerce's uniquely business related programs play an important role in achieving these National goals for moving our Country forward.

In order for General Administration to aggressively pursue the President's priorities and establish new policies for Commerce's Federal Programs, we have requested additional people and dollar investment in the Salaries and Expenses Appropriation.

I would now like to discuss the individual program increases we have requested:

The first program increase is for the development of the new Departmental financial management system. We are requesting $2,350,000 for this program.

As reported in the Department's 1992 Integrity Report on Internal Accounting and Administrative Controls required by the Federal Managers Financial Integrity Act (FMFIA), the Office of Management and Budget (OMB) has identified the Department's financial systems as a high risk area. Functional and internal control weaknesses in our financial management systems have been reported frequently by the Commerce Inspector General. The Department currently uses eight different primary financial systems. These have evolved from accounting systems which were developed in the 1960's and 1970's. They are not responsive to managers, are poorly documented, error prone, labor intensive, difficult to maintain, inflexible and outdated. These deficiencies have led to the development of numerous manual and automated stand-alone "cuff record" systems as managers have attempted to obtain the financial and administrative data they needed to manage their programs. As a result, we have numerous redundant systems which contain duplicate and often inconsistent financial information.

The data managers need would be produced on a routine basis by the financial information system supported with this program increase. Much thought and effort has already gone into developing the best approach to our financial management system. During FY 1991 a Commerce-wide project team documented the functional, operational and technical requirements to be met by a core financial system and the alternative baseline systems available to the Department. During FY 1992 the alternatives were evaluated and narrowed to those systems that would best meet Commerce requirements. In FY 1993 we will select the core financial system and establish an implementation center where comprehensive plans will be developed and carried out. These plans will determine how the core financial system will integrate with the Department's other subsidiary and supporting financial systems. During FY 1994 we will make and test any modifications we need to make in the core financial system as well as to the subsidiary systems. We continue to place a high priority on developing a new financial management system.

The second program increase is for Management Enhancement. We are requesting $2,000,000 and 21 positions for this program.

The increase will enhance the capacity to develop, implement, and coordinate policies and selected initiatives -- particularly those that cut across organizational lines in the Department and involve other government agencies. It will strengthen our capability to provide objective evaluations of program performance, results and impacts. The increase will provide funds to strengthen and oversee such areas as program evaluation, performance measurement, grants management, and major automated systems planning and acquisition. The ability to develop performance measures and to monitor them is necessary in order to meet requirements under the Chief Financial Officers Act. Because of increases in Departmental grant programs in EDA, NTIA, and NIST, the Office of the Secretary will need to build its capabilities to review, process and manage an increased number of grant applications and awards. Additional oversight also will be placed on areas that have been cited by the Inspector General's Office as high risk areas.

The third program increase covers the Department's share of a tunnel connecting the Herbert C. Hoover Building with the Federal Triangle Building. We are requesting $650,000 for our share of constructing the tunnel.

The tunnel will provide a direct weather-protected, safe pedestrian connection between the Herbert C. Hoover Building, the Federal Triangle Building and the Federal Triangle Metro Station.

It will allow the Department to receive large tractor trailer shipments which cannot presently be accommodated at the Herbert C. Hoover Building. The tunnel will facilitate interaction between the great bulk of trade promotion and licensing functions housed in the Herbert C. Hoover Building and the various trade-related organizations that will be housed in the Federal Triangle Building.

We are requesting adjustments to base of $1,330,000. These adjustments to base cover increases for such items as: the last three months of the FY 1993 pay raise, GSA Rent, and pay related benefits. These funds are necessary to allow us to continue operating at the 1993 level.

Mr. Chairman, this concludes my prepared remarks. I will be glad to answer any questions the Committee may have.

HERBERT C. HOOVER TUNNEL

Mr. SKAGGS. Thank you very much.

The first thing that comes to mind, which is not the most significant question to be posed to you, is how does this tunnel accommodate tractor trailer shipments?

Ms. GUTIERREZ. The Federal Triangle Building will have a loading ramp area that will accommodate large tractor trailers that cannot currently be received at the Herbert C. Hoover Building. We can use it for large equipment deliveries and things of that nature.

Mr. SKAGGS. Is that the tail wagging the dog, or is the primary purpose here pedestrian access and safety?

Ms. GUTIERREZ. It is probably a combination of both, but perhaps more heavily weighted to the pedestrian traffic. It will also allow our tourists and visitors a quick entrance to the Department, the aquarium and to the Great Hall which will be opening later. It will also provide a safe passage for Department of Commerce employees who currently use the Federal Triangle Metro stop.

Mr. SKAGGS. What is the total cost of the project and who are the other contributors proposed besides Commerce?

Ms. GUTIERREZ. It is a half-and-half split between GSA and the Department of Commerce. The total cost is about $1,300,000.

Mr. SKAGGS. Metro is not participating?

Ms. GUTIERREZ. No.

Mr. SKAGGS. Should they?

Ms. GUTIERREZ. I don't know. I don't know that that was even considered.

Mr. SKAGGS. Will it enhance access to the Metro system and security for Metro passengers?

Ms. GUTIERREZ. I would think that it will enhance access and provide a secure passage for Metro passengers. I use the Metro and I would feel comfortable using a tunnel and would be encouraged to use Metro even more, particularly if I had direct access to the Department and it was weather-safe. The tunnel was not a part of the original design of the building. It was after the excavations were started, that Commerce raised the issue with GSA about the plus side of having such a tunnel available.

MONITORING GRANTS

Mr. SKAGGS. I am curious. Your statement mentions the need in your agency to review the anticipated increases in grants flowing through EDA, NIST and NTIA. Would you give me a better flavor for how you function in that arena? Is this strictly a reviewing scrub after those agencies have made essentially their own grant decisions? How does that work?

Ms. GUTIERREZ. Essentially, over the last several years, there has been almost a complete deterioration of any formal program evaluation mechanism in the Department, either before or after the fact. The Inspector General obviously spends a lot of time finding things that weren't done quite right. If we had a good Departmental program evaluation system in place, we could address issues before they became problems.

We do go through a variety of review mechanisms that oversee contracts and question why a certain purchase is being made or why a certain contract is being requested. But, we do not have a formal, dedicated staff or a formal dedicated mechanism that makes a Departmental evaluation. By evaluation, I am talking about things like performance measures and complete oversight to make sure items we are considering or have funded are accomplishing their intended objectives.

Mr. SKAGGS. Well, let me ask you to give us a before and after comparison then. I am slightly familiar, for instance, with the Advanced Technology Program at NIST. How is a grant currently made, administered and evaluated under the ATP program and how do you anticipate it will be made, monitored and evaluated under the new approach?

Ms. GUTIERREZ. I will submit for the record the exact process in terms of each step that a proposal goes through. I do not have a detailed familiarity with the current internal mechanisms of NIST's ATP. However, what we envision is a formal Departmental evaluation mechanism, including performance measurements, that would work hand-in-glove at the front end to clearly state the objectives of the project and that the objectives clearly support the mission of the Department. There would be performance measures used along the way so we could come back and determine that we accomplished our goals.

Mr. SKAGGS. I didn't know whether you wished to add anything.

[The information follows:]

The National Institute of Standards and Technology (NIST) has published a document which was sent to interested applicants to help them in their application preparation. The NIST document includes the FEDERAL REGISTER notice announcing the availability of funds and the Code of Federal Regulations applicable to the Advanced Technology Program (ATP). The NIST document is called Proposal Preparation Kit Proposal Solicitations—ATP 92-01 and 93-01.

[CLERK'S NOTE.—The NIST document, Proposal Preparation Kit for Proposal Solicitations—ATP 92-01 and 93-01, was provided and is on file with the Committee.]

Ms. GUTIERREZ. The internal awards process would basically remain about the same. However, there would be more contact and building in of performance measures from the beginning. We would then come back after the fact making sure that we met established goals. This is the part that is now missing.

Mr. SKAGGS. Is there a peer review component to the awards process now?

Ms. GUTIERREZ. Yes.

Mr. SKAGGS. So these are not offhand decisions.

Ms. GUTIERREZ. No, not at all.

Mr. SKAGGS. Does that need to be enhanced as well, or are you looking primarily at having benchmarks built into the process that you can use to perform evaluations later?

Ms. GUTIERREZ. I think benchmarks are especially critical. The directive, at this point within the Department as new people are coming in, as we re-gear in terms of the new priorities is for everyone to review what they are doing and more importantly, why they are doing it. In my role as Deputy Assistant Secretary, I sit automatically on a lot of the review boards. It has been my experience in looking at certain activities contracts, and that the question that needs to be asked is, "what is the expressed purpose of doing certain things." The answer should not be because we have always done it, but simply how is this in line with the new priorities. Certainly in a time of tightening resources, we need to ask the question why.

Mr. Skaggs. Your statement, and I don't want to misquote you, suggested that for the last several years things have been, to use my own phrase, at sea in this particular area. Is there any major misuse of funds or grant authority that has surfaced that is in part driving your request for additional management controls on this that we haven't read about and ought to know about?

Ms. Gutierrez. I don't think there are gross instances of fraud or abuse or anything like that. The concern is more that we need to be proactive as opposed to reactive. Certainly with the requested increases in funding for EDA, NTIA, and NIST it becomes even more critical that every dollar that is expended, be expended the best way possible. So, it is not so much cleaning up something as it is becoming more effective and productive.

Mr. Skaggs. The IG or GAO have not identified any egregious problems in this area?

Ms. Gutierrez. Contracts management has been identified as a material weakness. We need to improve oversight and put more controls in place. There was not gross abuse or anything like that cited. Contracts management was simply cited as an area in which we need to do better.

FTE REDUCTIONS

Mr. Skaggs. I appreciate your elaborating on that.

The Department's budget-in-brief references the executive order dealing with the 4 percent across-the-board reduction by fiscal 1995. That translates, as I understand it, to something over 900 positions within the Department. Could you give us a sense of how all of that is going to play out as you distribute those cuts over the next few years?

Ms. Gutierrez. What we are in the process of doing is to look at everything that we have in line with the new priorities and the various program increases. What we are not doing is summarily deciding to make cuts across-the-board, we are looking at where it makes sense to do some things a little differently. We are also looking at attrition and voluntary retirement to handle some of the personnel reductions.

Mr. Skaggs. Are you expecting that there will be a need for actual reductions in force, or are you going to be able to get through this with taking vacancies and normal attrition and retirement?

Ms. Gutierrez. We have determined not yet if we will have to do RIFs or something of that nature. Again, what we are in the process of doing is looking at everything that is possible in terms of people who are eligible for retirement. In terms of attrition for example, we have had in place since last November a hiring freeze in the Salaries and Expenses appropriation. We continue to be extremely careful about how we are filling any vacancies. We are also encouraging people within the Department, as vacancies occur, to look internally as opposed to hiring anyone from the outside.

CRITICAL VACANCIES

Mr. SKAGGS. We all are avid readers of that little section of the Post every day about who is getting appointed to what. Where are we with respect to presidential appointments in the Department?

Ms. GUTIERREZ. We are actually moving along quite well. The first list of clearances has gone to the Hill. Mr. Rollwagen, who is the Deputy Secretary Designee, has gone forward. The name has gone forward for the Assistant Secretary for Legislative and Intergovernmental Affairs, and there will be several others that will be forthcoming very quickly. I think hearings have not yet been scheduled, but should be almost any day now.

In terms of the other presidential appointee levels, we have nominees, with either job offers out or acceptances already in, I believe, for almost everyone, except perhaps one at this point. I am not exactly sure. I feel that we will be making many more names public very shortly.

Mr. SKAGGS. And I don't mean to put you in a particularly awkward spot, but given the amount of business that is transacted between whomever is in your slot and the committee, what should be our expectation of when there will be a permanent position for Chief Financial Officer?

Ms. GUTIERREZ. There are currently two candidates that have gone through all of the reviews and have been interviewed I am particularly hopeful someone is selected soon, but I was hopeful two months ago that someone would be here instead of me. In any case, I expect within the next six weeks we should have someone, perhaps even sooner.

Mr. SKAGGS. You are career yourself?

Ms. GUTIERREZ. No.

Mr. SKAGGS. You are not.

Ms. GUTIERREZ. No, but I do have previous Federal government experience.

Mr. SKAGGS. I may have some additional questions, but we have been joined by the Ranking Member from Kentucky, Mr. Rogers. Let me turn it over to you for a while.

Mr. ROGERS. Thank you, Mr. Chairman. Good morning.

Ms. GUTIERREZ. Good morning, Mr. Rogers.

REQUESTED INCREASES

Mr. ROGERS. You are requesting an additional five positions in the Office of the Secretary, a 50 percent increase. What purpose will these new positions serve?

Ms. GUTIERREZ. The positions in the Office of the Secretary are specifically slated for policy and strategic planning that will coordinate policy initiatives now taking place throughout the Department.

Mr. ROGERS. So I assume then you will be abolishing the Office of Policy, Planning and Coordination?

Ms. GUTIERREZ. It is not an abolishment as such. That office is not staffed and in fact does not exist at this particular point. The office will be the Office of Policy and Strategic Planning.

Mr. ROGERS. I am confused. Are you going to keep the existing Office of Policy, Planning and Coordination?

Ms. GUTIERREZ. No.

Mr. ROGERS. I see. So you will replace it with this other new office?

Ms. GUTIERREZ. Yes, sir.

Mr. ROGERS. Now, you have listed about $150,000 for each of those five positions. Can you tell us the wage grade for each of those new five positions?

Ms. GUTIERREZ. In the policy office, there will be two senior executive service level people, and three 14/15 level.

Mr. ROGERS. Now, you also request 16 positions to improve management and oversight of existing programs. And you justify that increase largely due to the President's request to expand EDA; NIST and NTIA. We may find it difficult to find the money to expand those programs to the extent the President has requested. How many personnel are currently overseeing those three programs?

Ms. GUTIERREZ. I don't have that specific number. Let me just clarify and say that the additional positions that we are requesting for oversight and evaluation are not simply based on or premised on additional funding for EDA, NTIA or NIST. Basically, what we have in the Department at this point is a virtual nonexistence of program evaluation or coordinated performance measures.

So, it is the intent of this particular request that we put these capabilities in place. This oversight is necessary for the large variety of programs that already exist in the Department.

Mr. ROGERS. Well, how many of those 16 positions would be associated with oversight of those three programs I mentioned?

Ms. GUTIERREZ. Well, I can't specify that X number would be strictly geared to looking at EDA or NTIA. It is, again, the intent that as we have policy redirection and as we have initiatives cutting across organizational lines in the Department that we have staff dedicated to looking at things from the front end and certainly determining after the fact, that what was intended to happen is actually occurring, and that the dollars we are expending are being spent the best way possible.

UPGRADE OF THE FINANCIAL MANAGEMENT SYSTEM

Mr. ROGERS. You have included in your request a $2.4 million increase to upgrade the financial management systems. What will that $2.4 million be used for?

Ms. GUTIERREZ. The $2.4 million will help us in this particular year to acquire, test and implement some software, and also to begin to replace the old accounting systems. We are exploring and have identified some potential systems that we can put in place. Picking one of them is the next step.

Mr. ROGERS. Is that part of the multi-year plan?

Ms. GUTIERREZ. Excuse me?

Mr. ROGERS. Is that part of the multi-year plan?

Ms. Gutierrez. I do not quite understand the question.

Mr. Rogers. Is this the first installment on a multi-year plan?

Ms. Gutierrez. There will be additional dollars that will be necessary to fully implement a core financial system, yes.

essary to fully implement a core financial system, yes.

Mr. Rogers. Can you tell us about that?

Ms. Gutierrez. Well, I asked that specific question myself. I wanted to know what, in total, we were anticipating it would cost. The estimate is that it would cost about $41 million over the course of the next five years. That is its totality, everything from acquiring every license, every piece of software we need, training for staff, the taking over of all of the financial systems in the Department, including such things as travel, procurement and everything that is related.

Mr. Rogers. Did I hear you say $41 million?

Ms. Gutierrez. You did.

Mr. Rogers. Over what period of time?

Ms. Gutierrez. Five years, approximately five years.

Mr. Rogers. The first year is only $2.4 million?

Ms. Gutierrez. Correct.

Mr. Rogers. What could conceivably cost that much money in a management system?

Ms. Gutierrez. Well, that is fairly standard in terms of these systems. We have looked at what the cost has been in other departments that have integrated their entire system. Our costs are comparable with these other departments.

The dilemma is that within the Department what we have is a very antiquated system. Most of what we have was developed in the 1960s and some in the 1970s. There has virtually been no upgrade since then. So what we have is eight different systems that are being used by various bureaus, from which it is almost impossible to get data quickly or accurately.

I have asked for some things myself and it has been very difficult to get the numbers quickly. It takes weeks, longer than that, to get the data that one needs. So when we are talking about a complete revamping, this is not a patchwork quilt, but a complete, total revamping.

Mr. Rogers. How much is equipment, how much is personnel, how much is travel expenses and so forth?

Ms. Gutierrez. That I would like to submit for the record.

Mr. Rogers. Please do.

[The information follows:]

The $41 million is our five year cost estimate to implement a Department-wide financial management system that supports the budget execution/administrative control of funds, accounting, and financial management for the Department's total budget authority of approximately $3.5 billion. This system includes standard Department-wide subsidiary systems for budget, procurement, personal and real property, travel, grants, and labor cost distribution and the interfaces to Bureau-specific systems.

The $41 million estimate is based upon an earlier study to adapt the Corps of Engineers Financial Management System (CEFMS) for use at the Department. We were assisted by Price Waterhouse in estimating these costs. Our projected breakdown of this estimate is that $21.3 million will be spent for software, $10.1 million for hardware, and $9.6 million for Department personnel and related costs. CEFMS was at one time the leading candidate for implementation at Commerce. However, we have suspended active consideration of CEFMS because we found that it is highly customized to the Corps way of doing business and is not yet in production. We are in the process of analyzing other systems. However, we believe the total cost and types of costs of the system selected will be similar to CEFMS.

Our estimated implementation costs have been compared with several other agencies who have procured and implemented similar financial systems from the General Services Administration's Financial Management Systems Software (FMSS) schedule to further evaluate their reasonableness. The Department of the Interior spent $60 million over a six year period ending FY 1992 implementing an "off-the-shelf" schedule system and they still have not completed installing the system. The Department of Housing and Urban Development (HUD) estimates that it will spend $50 million over the next five years implementing the same system, and the Environmental Protection Agency has spent $20 million to implement the same system in their agency. We found that HUD is the closest to Commerce's environment in complexity and number of programs.

FIVE-YEAR PLAN

Mr. SKAGGS. Will the gentleman yield? I was noticing that both OMB and your Inspector General have identified this area as being particularly problematic.

Ms. GUTIERREZ. Correct.

Mr. SKAGGS. I assume that since it made it through the OMB screen, they have reviewed this five-year plan and found it sufficient to the task that they thought needed attention. So I guess that is one question.

Also, is the Inspector General involved in some way in looking at what this plan is, and whether it is going to, in fact, satisfy the needs that their audits have identified?

Ms. GUTIERREZ. I have not spoken to the Inspector General myself in terms of his involvement in this particular program. But I can assure you that, again, given the mechanisms that are in place in the Department for oversight over large systems purchases, there is involvement across-the-board, not just from program people, but also from the Inspector General's Office. I will certainly make it my business to make sure that if, for whatever reason, he has not been involved, that that office would certainly play a part in it.

Mr. SKAGGS. I yield back. Thank you, Mr. Rogers.

Mr. ROGERS. Well, irrespective of what OMB might think about it, the last time I checked, they don't appropriate funds.

Now, how much will you need in the second, third, and fourth and fifth years under this plan?

Ms. GUTIERREZ. I do not have those numbers in front of me. I will submit for the record what the projected plan is.

[The information follows:]

As we are still analyzing available options, we cannot accurately project the system project costs by fiscal year beyond FY 1994. We will conduct a detailed cost analysis of the options prior to the final choice of a Commerce system. This analysis will include costs by fiscal year. We will ensure that our Inspector General is fully involved in reviewing this cost analysis. We will be pleased to share this information with the Committee and advise you of expected annual costs for the selected system as soon as it is available.

FINANCIAL MANAGEMENT SYSTEM

Mr. ROGERS. Well, I would assume that since whatever financial management systems are in place now, the personnel that are there would assumably be transferred to this new program.

Ms. GUTIERREZ. Oh, absolutely.

Mr. Rogers. So I would assume then that most of the monies that you are requesting over the five years would be for equipment.

Ms. Gutierrez. For hardware and software, that is correct; licenses, exactly. We do have a deputy chief financial officer and an Office for Financial Management in place.

Mr. Rogers. Would this new system extend to the foreign commercial service, as well?

Ms. Gutierrez. It would encompass the entire Department of Commerce.

Mr. Rogers. Is it a communications system or is it just a financial management system?

Ms. Gutierrez. It is a financial management system. At this point what we are trying to address are the needs stated as part of the CFO law, the need for audited statements, the need for much more accurate financial information than what our systems are able to produce at this particular point.

Mr. Rogers. Who estimated this $41 million total cost?

Ms. Gutierrez. I had the office that deals with financial management that has been working to identify the Departmental Financial systems and related software give me this estimate. Now, what I neglected to say, and it is important to note, is that in examining the experience of other agencies that have been able to put similar systems in place, one large agency's savings would project to savings for Commerce of approximately $6.3 million a year. These savings are in person hours that are no longer necessary to correct records and operate outdated systems. So while $41 million is a tremendous amount of money, we see it as an investment that will pay off within a reasonable period of time.

The savings doesn't even take into account other kinds of benefits such as the type of information that program managers can retrieve easily and quickly in order to make program adjustments, corrections, to do what we need to do quickly.

Mr. Rogers. Well, is there some document or study that we could have that would illuminate for us what you have in mind over the five-year period?

Ms. Gutierrez. I will certainly see that one is gotten to you very quickly.

Mr. Rogers. All right. We do want to see a breakdown. It is a substantial sum of money in a budget that is squeezed. I mean we are going to be squeezing blood out of a turnip this year for programs.

Ms. Gutierrez. Absolutely. We will do that.

Mr. Rogers. So I would hope that you could be as frugal as possible.

Ms. Gutierrez. Absolutely.

Mr. Rogers. I certainly sympathize with your desire to better manage the money that we give to you, certainly. But we don't want to spend all of the money that we give you for Commerce's activities to keep track of the money we gave you. So if you will provide us something, we would appreciate it.

Ms. Gutierrez. Absolutely.

[The information follows:]

The attached information is provided as an overview of our Commerce Administrative Management System (CAMS) project. It describes the operating principles, the underlying concepts, the reasons for the project and implementation time frame.

"DEVELOPMENT OF A COMMERCE ADMINISTRATIVE MANAGEMENT SYSTEM"

Prepared by: Office of Financial Management
U. S. Department of Commerce

Date: 04-16-93

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A. INTRODUCTION

The Chief Financial Officers (CFOs) Act of 1990 requires each agency CFO to "develop and maintain an integrated agency accounting and financial management system, including financial reporting and internal controls..." The Act then lists required system attributes which, taken together, characterize a modern financial management system, one designed to support directly both program/administrative managers and oversight officials.

As drafted by the Office of Management and Budget (OMB), the revised OMB Circular A-127, Financial Management Systems, clarifies and emphasizes agency responsibilities defined in the CFOs Act. As the basis for its clarification, the revised circular provides definitions for an _information technology system,_ a _financial system,_ a _non-financial system,_ a _mixed system_ and, finally, a _single, integrated financial management system._

In light of these OMB definitions, the Department's existing and planned "functional systems" for travel, grants, procurement, real and personal property, personnel-payroll and budget formulation are "financial systems;" and existing systems which support loan administration, order-entry, inspection and grading, etc. are "mixed systems." Within Commerce there are other bureau-specific financial and mixed systems; these are termed "bureau-specific feeder systems" in this paper.

OMB guidance states that a _single, integrated financial management system_ shall consist of a unified set of financial systems and the financial portions of mixed systems encompassing the software, hardware, personnel, procedures (manual and automated), controls, and data necessary to manage financial operations of the agency and report on the agency's financial status to central agencies, Congress and the public.

In working to achieve a "single, integrated financial management system" for the Department--i.e., the Commerce Administrative Management System-- the Department's strategy is to modernize its financial and administrative management activities, as well as transform the systems environment within which these activities take place. Our strategy and plan is to design and implement process improvements which are enabled by/coordinated with improved systems.

The attached document, _Commerce's Guiding Vision, Enabling Concept of Operation and Supporting Architecture for Financial Management_ (September 1991), represents a consensus Commerce blueprint for modernizing financial management throughout the Department. It was drafted by the Commerce-wide Project

Management Team which developed the requirements to be met by a new core financial system (CFS) for the Department. It was then endorsed by the cognizant Departmental steering committee and presented to OMB and Treasury oversight staff.

The guiding vision foresees:

- Program/administrative managers enabled to also function as responsible and accountable fiscal managers;
- Up-to-date, complete and reliable official financial data readily available to all authorized personnel;
- A financial system which supports both work/resource planning and financial/program performance measurement; and
- Financial accounting accomplished largely as a by-product of streamlined programmatic/administrative operations.

The enabling concept of operation is characterized by the following operational capabilities:

- Paperless processing using electronic forms, supported by electronic signature approval;
- On-line reservation of funds, as a by-product of creating electronic forms which request goods and services;
- On-line validation of funds availability/commitment of funds, as an integral part of the electronic signature approval process;
- Simultaneous capture and use of direct and indirect labor hours for project management, financial accounting and time-and-attendance purposes; and
- On-line authorized query and retrieval of official financial and accounting data (e.g., commitments, obligations).

The overall system architecture must support:

- Portability of (at least) the standard core financial system software across diverse hardware platforms.
- Seamless real-time capture, validation, processing and recording of most financial transactions;
- Program ownership and administration of program-specific financial data; and
- Distributed databases to accommodate bureau-specific/ program-specific business cultures.

To preclude technological obsolescence of the planned system, we need to continuously and cost-effectively incorporate new technologies and tools as these become available. This translates into a requirement to plan and incrementally achieve a standards-based open systems environment (OSE). With this objective in mind, the Office of Financial Management has entered into a consulting agreement with NIST's Computer Systems Laboratory.

In The Government's Technology Management Challenge, the proceedings of a GAO-sponsored symposium (October 4 and 5, 1989), the industry and Government leaders who participated proposed five principles for effective management. Their first principle was "commitment and vision begin at the top." They went on to assert that "without clear direction and support from the top, modernization programs tend to degenerate into loose collections of independent systems. Often these systems are developed under the oversight of technical managers who focus on the needs of their individual units rather than the organization's larger mission and goals."

The initiative discussed in this paper is the development of a Commerce Administrative Management System (CAMS) compatible with our Commerce strategic vision, compliant with related central agency guidance, and fully responsive to Governmentwide and Commerce-unique requirements. This initiative also encompasses the management structure necessary for ensuring that commitment to our strategic vision exists at the top and is sustained throughout the development and Departmentwide implementation of this new system. Each of the bureaus will implement the CFS component of CAMS against detailed, bureau-specific "operational profiles"--with the major bureaus free to operate the CFS on their own hardware. In some cases a major bureau can be expected to cross-service a number of smaller ones.

B. PURPOSE

The Department's program/administrative managers and oversight officials do not have up-to-date, complete, consistent and reliable official financial data and financial performance information. They require these data and information to make sound, timely management decisions. This deficiency puts the proper financial management of Commerce's programs, administrative functions, and related resources at growing risk. Recognizing this, the OMB has placed the Department's "financial management systems" on the Government's list of high-risk management areas. As noted above, the CFOs Act now requires the Department to "develop and maintain an integrated accounting and financial management system, to include financial reporting and internal controls..."

The purpose of pursuing the CAMS initiative is two-fold:

1. Achieve a core financial system (CFS) which complies with all central agency, Commerce, Congressional, and JFMIP requirements; is integrated/interfaced with equally compliant budget formulation, functional (travel, grants, procurement, real and personal property, personnel-payroll) and mixed (loans and order-entry, etc.) systems; and is interfaced with bureau-specific feeder systems which satisfy established financial integrity standards.

2. Develop and implement the above-resulting Commerce Administrative Management System (CAMS) such that it advances the Department toward its vision for financial management.

The initial critical task in pursuing the CAMS initiative is, therefore, a systematic effort to decide which CFS software alternative would work best for Commerce. As shown on Chart I, an analysis of each alternative is being carried out which encompasses both functional and technical evaluations. The decision process is also shown on Chart No. I.

C. CAPABILITIES

Infrastructure

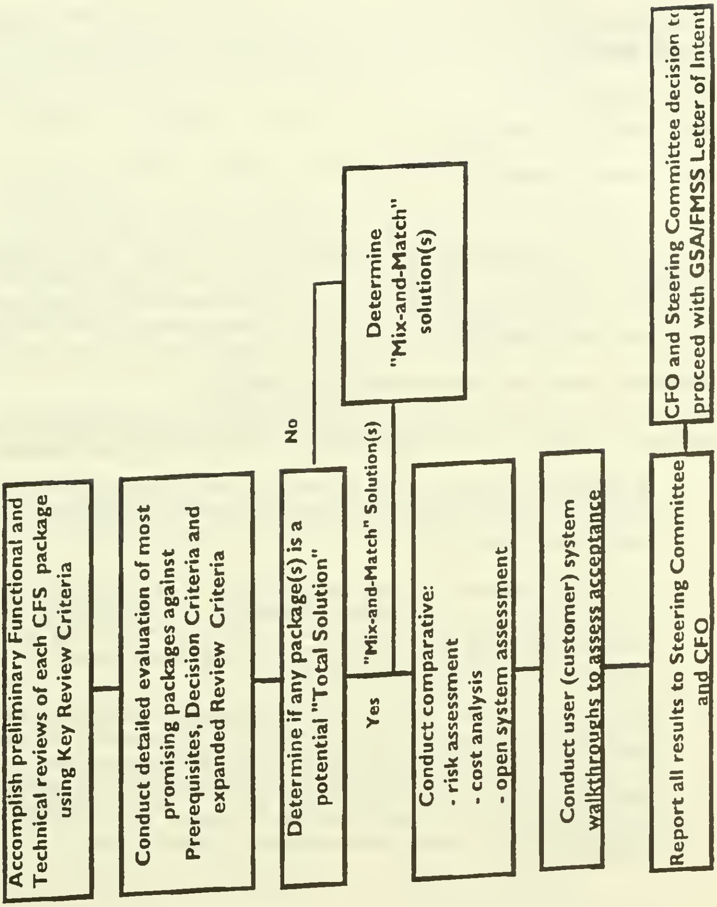
A CAMS Steering Committee has been established by the Chief Financial Officer and Assistant Secretary for Administration to guide and support the multi-year project to achieve a "single, integrated financial management system" for Commerce.

The Committee is comprised of senior executives representing the major bureaus (NOAA, Census, NIST and PTO)--who chair it in rotation--and the office directors within Department-level Administration. Other key bureau and Office of Secretary staff support the work of the Committee.

A Project Manager, responsible to the above committee, has been designated and tasked with coordinating the planning, development, integration and implementation Departmentwide of CAMS. Supporting the Project Manager are the following Commerce-wide teams:

- Project Management Team (CFS)
- Analysis & Evaluation Team (CFS)
- Information Resources Management Team (CFS)

CHART I
CORE FINANCIAL SYSTEM
DECISION PROCESS STEPS


Accomplish preliminary Functional and Technical reviews of each CFS package using Key Review Criteria
Conduct detailed evaluation of most promising packages against Prerequisites, Decision Criteria and expanded Review Criteria
Determine if any package(s) is a potential "Total Solution"
No
Determine "Mix-and-Match" solution(s)
Yes
"Mix-and-Match" Solution(s)
Conduct comparative:
- risk assessment
- cost analysis
- open system assessment
Conduct user (customer) system walkthroughs to assess acceptance
Report all results to Steering Committee and CFO
CFO and Steering Committee decision t
proceed with GSA/FMSS Letter of Intent

Closely coordinating Departmental functional systems initiatives with the project manager are the following additional Commerce-wide teams:

- Procurement
- Personal Property
- Real Property
- Travel

An interim Implementation Center (IC) has been established and a permanent facility planned for occupation in May 1993. The Center is being equipped and staffed to enable it to focus the activities--and husband the scarce resources--needed to develop and implement CAMS.

Interim Financial Management Improvements

The following dual-track strategy strikes an acceptable overall balance between near- and longer-term improvement objectives:

- Track 1: Analyze each bureau's existing systems; assess and prioritize related deficiencies; explore commonality across bureaus to identify opportunities for coordinating corrective actions.

  For each bureau, design and execute a results-driven program of corrective action plans (CAPs). For each CAP, aim for measurable gains in weeks and months, not years; and coordinate each bureau's CAPs, as appropriate, with the Track 2 initiative (below).

- Track 2: Pursue the development and phased implementation of a modern Commerce Administrative Management System(CAMS); assure that it will meet JFMIP and Commerce-unique requirements; streamline/update some critical bureau-specific business processes as part of each bureau's implementation of CAMS; and then expand such "business reengineering", once this system is successfully implemented.

Master Plan

Our plan for modernizing Commerce's administrative management systems/streamlining related processes is outlined below:

- Conceptualize the initial version of the CAMS system as:
  - A modern, JFMIP-compliant core financial system (CFS) which is
  - Integrated/interfaced with a set of Departmental functional/mixed systems; and which is
  - Also interfaced to a number of bureau-unique feeder systems.
- Base the CFS on an existing software system which is compatible with our strategic vision and can be cost effectively modified to meet both Governmentwide and Commerce-unique requirements; select
  - A GSA/FMSS schedule package,
  - Another agency's financial management system, or
  - Commercial off-the-shelf software.
- Also base each Departmental functional/mixed system on existing software compatible with our strategic vision; select
  - An existing Commerce system,
  - Another agency's system, or
  - An off-the-shelf commercial package.
- Identify, specify, construct and test the modifications needed to the selected CFS software--and to the software selected for each functional/mixed system--to meet JFMIP and Commerce-unique requirements.
- Conduct follow-on performance evaluations of the selected CFS software to determine corresponding technical requirements:
  - Initially, without considering interfacing Departmental functional/mixed systems;
  - Next, with these interfacing systems taken into consideration; and
  - Finally, using the modified CFS software and taking bureau-specific interfacing systems into account (as well as the interfacing Departmental systems).
- For each bureau, identify its system architectural alternatives for implementing/operating CAMS, then conduct a benefit/cost analysis (B/CA) of these and select the most cost-effective:

  - Develop the bureau's detailed operational profile;
  - Use performance evaluation results to identify the architectural alternatives;
  - Use follow-on stress-test results as input to the B/CA; and
  - Select best architecture/develop "buy-list" and acquire/install missing technology.

- Achieve the initial version of CAMS and implement it within the pilot bureau (i.e., the Bureau of the Census):

  - Modify the selected CFS software to meet JFMIP and Commerce-unique requirements,
  - Modify the software selected for each Departmental functional/mixed system to meet JFMIP and Commerce-unique requirements,
  - Plan and accomplish systems integration,
  - Assure the financial integrity of each pilot-bureau feeder system,
  - Interface each of these feeder systems,
  - Design and accomplish initial business-process reengineering/implement CAMS within the pilot bureau, and
  - Expand business-process reengineering within the pilot bureau.

- Proceed with initial business-process reengineering/system implementation/expanded process reengineering for each of the remaining bureaus.

- Plan and accomplish software reengineering of all interfacing Departmental functional/mixed systems to achieve a fully integrated Commerce Administrative Management System.

Project Plans

The initial set of supporting project plans, outlined below, are to be coordinated in the above Master Plan:

- Commerce Financial and Administrative Systems "Implementation Center" (IC)

  - Plan an IC with a mission to focus/facilitate all analytical and technical efforts needed to achieve the planned Commerce Administrative Management System.
  - Establish, equip and staff the Center.

- "Core Financial System"
  - Select the CFS software per the plan depicted on Chart I.
  - Design and construct all needed software changes.
  - Specify and build all required interfaces.
  - Accomplish systems integration.

- "Departmental Functional/Mixed Systems"
  - Form a "functional team" for each functional area.
  - Develop/update the functional/operational requirements to be met by the corresponding automated system.
  - Based on the software selected for the CFS, determine whether a stand-alone Departmental system will be required.
  - If the selected CFS software includes support for the functional area, develop a strategy and plan for evaluating the CFS software, in depth, against documented functional/operational requirements.
  - Execute the plan and identify/scope needed changes/enhancements.
  - Finally, work closely with the CAMS project manager to specify each change/ensure that it is adequately tested, once made.
  - If the selected CFS software does not include such support, identify stand-alone functional systems which might be adapted for Departmentwide use, and then interface to the selected CFS software. In this case proceed by using the CFS project plan as a model.

- "Pilot Bureau"
  - Develop bureau's preferred operational profile, given selected CFS and resulting set of interfacing Departmental functional/mixed systems.
  - Using results of performance tests, along with results of Independent Verification and Validation (IV&V), formulate a set of bureau-specific system architectural alternatives for the preferred operational profile.
  - Design a B/CA for selecting most cost-effective architecture.
  - Conduct and report the B/CA.
  - Against the selected system architecture, identify/specify 'missing' technology--then acquire and install within the pilot bureau.
  - Plan, conduct and report follow-on performance tests and refine system architecture accordingly.
  - Modify each interfacing pilot-bureau feeder system to remedy functional/financial-integrity deficiencies.

  - Design and plan initial set of improvements to pilot bureau's existing business processes.
  - Plan and accomplish systems integration testing.
  - Implement CAMS and initial set of related process improvements.

- "Technology Opportunity: Repository Management"
  - Acquire and implement a FIPS Pub 156-compliant repository management system (RMS).
  - Train designated support staff.
  - Specify and enforce RMS disciplines.

- "Technology Opportunity: Use of I-CASE Tools"
  - Train key technical staff in use of I-CASE tools.
  - Design and pursue a proof-of-concept effort to assess feasibility/cost-effectiveness of mapping CFS applications into the above I-CASE tools.
  - Provide outcomes to analysis which refines the Financial Summary for this paper.
  - Also apply "lessons learned" when planning changes to any software application.

Management

The initiative to achieve a Commerce Administrative Management System began in FY 1990 as a project established to plan and develop a "standard financial system" for Commerce. A Project Management Team was created to plan the new system, beginning with the development, documentation and validation of Commerce's accounting functional requirements. To oversee and support this project a Departmental Financial Systems Steering Committee was concurrently established.

On September 21, 1992, a CAMS Steering Committee, established by the Chief Financial Officer and Assistant Secretary for Administration, held its initial meeting. This successor body is characterized by an expanded membership and charter, incorporation of the above Project Management Team as operational staff and by leadership provided by the major bureaus. To ensure such leadership, the Steering Committee shall be chaired, on a rotational basis, by a senior executive from one of the represented bureaus. Also on the Steering Committee is the head of each office within Departmental Administration. Additional key bureau and Department-level staff act as advisors to the Committee.

The Committee has underscored the importance of viewing, planning and accomplishing the implementation of the new system taking bureau-specific needs, time frames and realities into account.

Key Players

A well-qualified Department-level CAMS Project Manager has been appointed and is now leading the effort to evaluate the software alternatives identified for the CFS. He is supported by a full-time Analysis and Evaluation (A&E) Team comprised of key financial/accounting staff from throughout the Department. Additional financial/accounting staff will join the team, as required. Additionally, the Project Manager is supported/advised by a Project Management Team and an IRM Support Team--each comprised of bureau and Department-level staff who meet and deliberate on an as-needed basis.

Finally, Departmental functional systems teams--Travel, Procurement and Property (real and personal)--have been formed of respective Department-level and bureau functional managers and key staff. These teams work very closely with the CAMS Project Manager in planning/carrying out their tasks.

The individual members of the CAMS Steering Committee have provided the project with highly qualified, highly motivated staff for the various supporting teams. Collectively, the members have fashioned, and are undertaking, a truly unprecedented Commerce-wide collaboration.

Accomplishments

The following accomplishments to date have strengthened the Department's capabilities for successfully developing the planned system:

- Creation of a pro-active Steering Committee intent on achieving a successful modernization of our Commerce administrative management systems;
- Development of a Commerce strategic vision for financial management.
- Development, documentation and validation of Commerce's functional requirements for a core financial system.
- Completion of a preliminary analysis of available Federal accounting/financial management systems;
- Completion of a formal evaluation of the above alternatives and identification of the most promising ones;

- Establishment and successful operation of an interim Implementation Center and the planning of a permanent facility;
- Creation of an Analysis and Evaluation Team and an IRM Team to analyze/evaluate/compare the most promising CFS software alternatives;
- Creation of a Project Management Team to support/direct the CAMS project manager;
- Creation of "Functional Teams" to develop the requirements to be met by Commerce-wide systems for travel, procurement, real and personal property; where necessary, to identify, evaluate and recommend software alternatives for stand-alone Departmental functional/mixed systems; and finally, to identify/specify/quality-assure software changes needed to satisfy JFMIP and Commerce-unique functional requirements;
- Preparation of an inventory of all financial, mixed and bureau-specific feeder systems within Commerce;
- Execution of a computer technology consulting support agreement with NIST's Computer Systems Laboratory;
- Award of a multi-year, task-ordering contract with Pilot Research Associates, Inc. for contractor technical/analytical support.

D. AGENCY COMPONENTS INVOLVED

The CAMS Steering Committee supports and reports to the Chief Financial Officer. The Steering Committee represents the major bureaus and all Department-level offices concerned with the development and implementation of "a single, integrated financial management system." Where indicated, Department Organization Orders (DOOs) will clarify roles and responsibilities of each of the organizations represented on the Committee.

E. ALTERNATIVES

The status quo alternative is simply not an acceptable one, given that the Department's financial systems are listed on OMB's Governmentwide high-risk list. The related alternative of "modernizing" an existing bureau financial system to serve as the Department's core financial system is not feasible: all these bureau systems are seriously outdated; and most are tightly tailored to bureau-specific requirements/business processes.

The most cost-effective strategy for achieving a core financial system is to select an existing, up-to-date, and relatively generic system--then adapt it for Commerce-wide use as our core financial system. Once this system is selected, required stand-alone functional/mixed systems would become known; software alternatives for each of these CAMS components would then be identified, evaluated, and selected--with cross-servicing included among the alternatives considered for these interfacing systems.

In keeping with OMB guidance, we plan to base each CAMS software component on an existing Federal system, specifically:

- A GSA/FMSS schedule package,
- Another off-the-shelf package, or
- Another agency's system.

After identifying the software alternatives available from the above sources, we will evaluate them in terms of their fit to Governmentwide and Commerce-unique requirements--functional, operational and technical--and their compatibility with our strategic vision.

In the case of Departmental functional/mixed systems, when weighing a given software alternative we will adopt the following approach:

- If the software is, in effect, an integrated module of the selected CFS software and meet--or can be cost-effectively modified to meet--Governmentwide and Commerce-unique requirements, we will go with this CFS module;
- Otherwise, we will select an existing stand-alone system that meets (possibly via cross-servicing) or can be cost effectively adapted to meet Governmentwide and Commerce-unique requirements.

Once the CAMS software components are selected, bureau operational profiles will be detailed and system architectural alternatives for operating CAMS evaluated. Where cost-effective, the alternatives most aligned with our strategic vision will be selected and implemented.

F. FINANCIAL SUMMARY

The estimated costs to implement CAMS (which includes the core financial system and Departmental Functional Systems) is $41 million over the next five years. These cost estimates were based on the original assumption that the Department would adapt the Corps of Engineers' Financial Management System (CEFMS) for use as Commerce's CFS. As such the Financial Summary will be revised--once the CFS software alternative is selected and more exact development/implementation cost estimates can be developed.

G. BENEFITS

- The planned Commerce Administrative Management System will achieve Commerce's compliance with financial systems mandates of the CFO Act and OMB Circular A-127.
- This new system will remove the Department's "financial systems" from OMB's Governmentwide high-risk management list.
- Over time, the system will transform how financial management is viewed and performed throughout Commerce: it will allow us to actualize our Commerce Guiding Vision, Enabling Concept of Operation and Supporting Architecture for Financial Management.
- Standard software, centrally maintained, will avoid the cost-multiplier now operative.
- If successful, mapping (at least) the core financial software into I-CASE tools would lower dramatically those life cycle costs centered on maintaining/enhancing the system.
- The system, as envisaged, would also support and encourage the streamlining of business processes throughout Commerce. Such business-process reengineering is the surest route to dramatic cost-avoidances and quality improvements.

H. SCHEDULE OBJECTIVES

FY 1993

- Relocate CAMS project to a permanent, fully functioning IC.
- Identify the most-promising CFS alternatives.
- Conduct and report an IV&V of each CFS finalist.
- Assess operational fit of each to Commerce's business environments.
- Identify and scope software changes required for each.
- Recommend a performance-testing regime for each, then conduct and analyze the test results.
- Cost out each alternative and assess its risks.
- Report comparative cost and risk analyses and recommend a CFS software acquisition.

- Obtain Steering Committee's and Chief Financial Officer's decision.
- Issue a Letter of Intent (LOI) to procure a CFS.
- Identify required stand-alone Departmental functional/mixed systems and corresponding software alternatives.
- Update functional/operational requirements for travel, procurement, real and personal property.
- Identify pilot bureau's interfacing feeder systems/initiate financial-integrity assessment of these.
- Update CAMS Concept Study and Project Plans.

FY 1994:

- Procure CFS.
- Specify and begin making initial set of CFS software changes.
- Develop and publish financial integrity standards for feeder systems.
- Evaluate/select software for each stand-alone Departmental functional/mixed system.
- Specify and begin making all remaining software changes: CFS, stand-alone Departmental functional/mixed systems, interfacing pilot-bureau feeder systems.
- Plan and accomplish follow-on performance tests.
- Conduct and report benefit/cost analysis of system architectural alternatives for pilot bureau implementation.
- Select the most cost-effective architecture; identify/specify/issue RFP for additional pilot-bureau technology.
- Develop CAMS implementation plan for pilot bureau.

FY 1995

- Install additional pilot-bureau technology.
- Complete and test all software changes/interfaces needed to implement CAMS within pilot bureau.

- Conduct system integration tests at IC.
- Conduct business process reengineering (streamlining) at pilot bureau.
- Conduct pilot bureau training at IC.
- Stress-test the system using modified software.
- Tune the system/refine system architecture at IC.

FY 1996

- Implement CAMS within pilot bureau (i.e., Census Bureau).
- Conduct post-implementation reviews.
- Schedule and plan follow-on implementations.

FY 1997-98

- Phased implementation of remaining bureaus.

I. SECURITY ISSUES

Because it encompasses sensitive data and is important to mission accomplishment, the planned Commerce Administrative Management System is a "sensitive system" under the Computer Security Act of 1987. Therefore, the Office of Financial Management will prepare a Sensitive System Security Plan which overviews the security and privacy requirements applicable to this system and provides plans for meeting these requirements.

Programming necessary for security protection will be accomplished at the time other modifications are made to the selected baseline core financial system to adapt it for use at Commerce.

J. COLLECTIONS FROM THE PUBLIC

Department-level Electronic Data Interchange (EDI) requirements and pilot projects will be incorporated within the master plan for the Commerce Administrative Management System. More generally, the master plan will be linked increasingly with the Department's Electronic Commerce 2000 initiative, as this develops.

COMMERCE'S GUIDING VISION, ENABLING CONCEPT OF OPERATION AND SUPPORTING ARCHITECTURE FOR FINANCIAL MANAGEMENT

GUIDING VISION, ENABLING CONCEPT OF OPERATION AND SUPPORTING ARCHITECTURE FOR COMMERCE'S FINANCIAL MANAGEMENT

Guiding Vision

- Financial Management permeates all the Department's programs and operations;
- It is performed within programs and operations by managers who are also responsible and accountable financial managers;
- These program and operational managers understand all applicable financial management requirements;
- They have ready access to all the data and information needed to satisfy these requirements; and
- They are supported by modern financial systems, and related concepts of operation, which ensure the integrity, timeliness, and completeness of the above data and information.

Operational Concept

- **Bureaus operate standard financial management software (e.g., core financial system) on their own hardware platforms.**
- **Standard financial management software is centrally maintained (to keep it standard), but the Bureaus collectively decide software changes.**
- **Financial data is captured as a by-product of program and administrative operations, whenever feasible.**

  The objective is "single-entry, source capture of data." (e.g, one-time capture of labor hours for project management, financial accounting, and payroll time-and-attendance eliminates duplicate data entry and related accounting reconciliations, while improving significantly the timeliness of the financial information provided to program managers.)

- **Paperless processing, using electronic forms and electronic approval, is an integral feature of the system.**

  Electronic processing avoids cumbersome, costly, and complex paper processes which significantly increase cost, compromise data integrity, and encourage "cuff-record" systems. Rather than typing the required data on a purchase requisition form, travel form, etc., the system produces the form electronically, while concurrently recording the appropriate accounting transactions.

- **Simultaneous with the creation/approval of the electronic form, the system automatically validates the availability of funding and commits (reserves) funds for the expenditure.**

  Managers immediately know the impact of intended expenditures against their budgets. Rather than creating a purchase request and only then determining whether funding is available, the system accomplishes this step as a byproduct of creating the request.

  (Program managers are now forced to maintain "cuff-record" systems -- to monitor expenditures in the "pipeline" to determine the impact of funding on contending expenditures.)

- **Embedded intelligence is used throughout the system to significantly improve data integrity.**

  Pre-defined data entry screens and transaction code tables automatically invoke the necessary accounting entries to update appropriate account balances (e.g., a user calls up the purchase requisition screen, then based on the user's security profile, the system allows the user to view, create and/or approve a requisition. The system also knows the user's budget authority and the types of requisitions -- contractual services, equipment purchases, etc.-- authorized for the user.)

  The cost savings realized through reduced data reconciliation and correction are an important benefit of embedded intelligence.

- **Up-to-date official financial data are available for on-line query based on user security profiles.**

  Official financial data are maintained as close as possible to the source, and in the format needed by program managers, while concurrently supporting the official accounting records of the bureau. Data integrity is enhanced by the elimination of data redundancy and data reconciliation.

Supporting Architecture

- **An increasingly Open Systems Environment (OSE) is achieved that provides for inter-operability (i.e., linkage or inter-connectivity) of hardware/software, as well as portability of data and applications across diverse computing environments.**

The Department's commitment to a standards-based OSE recognizes that, over the long term, no single vendor can supply the entire spectrum of our information technology needs. (To foster innovation, improve productivity, and preclude system obsolescence, we will need to continually acquire and implement new information technologies as they become available.)

- **The inter-connectivity of systems evolves to become seamless.**

  Feeder systems pass data to and retrieve data from the core financial system in a way that is transparent to the user. (e.g., a travel system queries/updates funding availability and records appropriate accounting transactions in the core financial system, as well as obtaining information from and passing data to the payroll system. All of these functions are accomplished as an integral part of recording travel transactions, without the user's awareness of the connectivity among these systems.)

- **Financial data is administered by the program managers.**

  This is accomplished through distributed databases, where clear ownership (primary owner) is established for each program financial database. Updates of the data are only executed under the supervision or with the prior approval of the owner of the data.

- **Distributed data processing supports Bureau-unique, program-unique "business cultures."**

  Data are processed and stored at their most utilized level.

CFO VACANCY

Mr. ROGERS. You say there are two candidates for the Chief Financial Officer?

Ms. GUTIERREZ. Yes, my understanding is that there are at least two candidiates. There have been more than that that have been interviewed. There are two that are very serious candidates at this point.

Mr. ROGERS. I gather you don't consider yourself one of those?

Ms. GUTIERREZ. No.

Mr. ROGERS. When did you anticipate a recommendation being made, or do you know?

Ms. GUTIERREZ. I am not positive, but it is my understanding that that will be forthcoming very shortly, and given all the processes that have to take place, I would hope that within a month to six weeks that the process will be completed.

Mr. ROGERS. Thank you very much.

COORDINATING REPROGRAMMING NOTIFICATIONS

Mr. SKAGGS. Just a couple of more questions. This is an easy one. Can we count on the Assistant Secretary for Administration continuing to coordinate notification of reprogramming of funds as required under the appropriate provisions of our annual appropriations act?

Ms. GUTIERREZ. Absolutely.

Mr. SKAGGS. And further, will this new integrated financial management system enhance the Department's ability to comply with committee reprogramming procedures?

Ms. GUTIERREZ. It will greatly facilitate everything that we need to do.

TRANSFER PROPOSAL

Mr. SKAGGS. Terrific.

The Department proposed an extensive number of interappropriation transfers at the end of last year, some of which were okayed by the committee back in February. I think at that time the committee suggested that some of the shortfalls within the NOAA operating accounts might be made up with your remaining transfer authority from other lines. What is the status of what might be called round two of the transfer proposal?

Ms. GUTIERREZ. There are discussions that are under way right now in the Department in terms of what the final numbers will look like.

Mr. SKAGGS. Should we expect further notices of transfer and reprogramming within the next couple of weeks?

Ms. GUTIERREZ. Yes.

NOAA SHORTFALLS

Mr. SKAGGS. We were told at the time of the proposal back in December that there would be dire consequences to NOAA if we didn't provide some relief. What is the current status of those shortfalls in the NOAA budget?

Ms. Gutierrez. I don't have all of the specifics, and I will be happy to provide that particular answer.

Mr. Skaggs. If you would.

[The information follows:]

Nothing has changed with the status or magnitude of NOAA's operating shortfalls since the initial transfer and reprogramming proposals were submitted to the committee in December, 1992. We are currently reviewing options to alleviate these problems and will forward our preferred solution option to the Committees soon.

OMB REQUEST

Mr. Skaggs. A necessary question for the record. Can you tell us what you requested of OMB for your budget, and what items OMB eliminated from your request?

Ms. Gutierrez. We requested $38,042,000. Nothing was disallowed.

Mr. Skaggs. And they are looking for somebody else for this job?

Ms. Gutierrez. I didn't say they were looking for someone else; I said I wouldn't be a candidate for this job.

Mr. Skaggs. We will have a few additional questions for the record. Mr. Rogers, anything further?

Mr. Rogers. No, except that I am amazed. That is the first time I have ever heard in my lifetime of OMB giving you every penny that you asked for.

Ms. Gutierrez. We worked very closely at the front end in laying out what we thought was a very frugal and a very targeted budget.

Mr. Rogers. I gather you did.

Mr. Skaggs. Thank you very much.

Ms. Gutierrez. Thank you.

[The following questions were submitted to be answered for the record:]

QUESTIONS FOR THE RECORD FROM CONGRESSMAN SKAGGS

GENERAL ADMINISTRATION

Department-wide Savings

QUESTION:

You are assuming that a large portion of the decrease will come from reimbursable positions. How confident are you that these reimbursable savings will actually materialize in FY 1994?

ANSWER:

The Department anticipates reducing its reimbursable FTE substantially in 1994 (approximately 561). With the new prioritization within the Department, we feel that the Department will be able to achieve this reduction.

QUESTION:

Please provide for the record a chart depicting the Department's FTE by agency for FY 1993 enacted, FY 1993 current, and the FY 1994 request, including the reductions taken in FY 1993 and FY 1994. Include reimbursable as well as direct FTE.

ANSWER:

The attached chart depicts the Department FY 1993 FTE and FY 1994 FTE levels.

DEPARTMENT OF COMMERCE
FY 1993/1994 FTE

	1993 ENACTED			1993 CURRENT			1994 REQUEST		
	Direct	Reimbursable	Total	Direct	Reimbursable	Total	Direct	Reimbursable	Total
GENERAL ADMINISTRATION	515	747	1,262	510	740	1,250	535	713	1,248
ECONOMIC DEVELOPMENT ADMINISTRATION	353	2	355	349	2	351	353	2	355
BUREAU OF THE CENSUS	5,224	3,569	8,793	5,172	3,532	8,704	4,996	3,179	8,175
ECONOMICS AND STATISTICAL ANALYSIS	557	43	600	551	43	594	532	33	565
INTERNATIONAL TRADE ADMINISTRATION	2,335	30	2,365	2,311	30	2,341	2,358	30	2,388
BUREAU OF EXPORT ADMINISTRATION	430	4	434	426	4	430	303	4	307
MINORITY BUSINESS DEVELOPMENT AGENCY	190	0	190	188	0	188	190	0	190
UNITED STATES TRAVEL & TOURISM ADMIN	94	0	94	94	0	94	96	0	96
NATIONAL OCEANIC & ATMOSPHERIC ADMIN	11,966	1,307	13,273	11,927	1,213	13,140	11,935	1,213	13,148
PATENT AND TRADEMARK OFFICE	5,101	0	5,101	5,035	0	5,035	4,973	0	4,973
TECHNOLOGY ADMINISTRATION	41	2	43	41	2	43	43	0	43
NATIONAL TECHNICAL INFORMATION SERVICE	0	350	350	0	346	346	0	380	380
NAT'L INSTITUTE OF STANDARDS & TECH	1,917	1,292	3,209	1,998	1,179	3,177	2,289	976	3,265
NATIONAL TELECOMMUNICATIONS & INFO ADMIN	221	70	291	234	69	303	249	69	318
TOTAL, DOC	28,944	7,416	36,360	28,836	7,160	35,996	28,852	6,599	35,451

Status of Appointments

QUESTION:

How is the Department's ensuring that these appointments conform to the President's goal of a diversified government that represents a cross-section of America?

ANSWER:

We at Commerce are proud of our accomplishments to date with reference to the diversity of our appointees. Our candidate pools have represented a wide variety of individuals and we have every reason to believe that this practice will continue.

Financial Management Improvement

QUESTION:

The Department is requesting an increase of $2,350,000 to begin development of a Department-wide core financial management system to replace eight existing primary accounting systems and numerous unofficial systems. What is the current status of the development of the system, and what level of resources is being devoted to the improvement project in FY 1993?

ANSWER:

In FY 1993, we anticipate $1.562 million will be spent. As of this point, we have accomplished the following major tasks:

> We have created a Commerce Administrative Management System (CAMS) Steering Committee comprised of senior executives of the bureaus to assist the Chief Financial Officer and Deputy Chief Financial Officer in overseeing the Commerce system.
>
> We have established an Implementation Center to perform the detailed evaluation and manage the deployment of the system throughout Commerce.
>
> We have developed a vision for Commerce financial management and a strategic plan for implementing the system. This Plan was approved by the Office of Management and Budget (OMB).
>
> We developed the functional requirements for the core financial system and began developing requirements for the real and personal property and procurement functions.

We developed detailed project plans for the core financial system and each of the functions being integrated into CAMS.

We developed our "key technical/functional review and decision criteria."

We completed a high level review of the General Services Administration's Federal Management Systems Software schedule and in the public domain.

We are currently conducting detailed functional and technical reviews of the most promising alternative systems.

QUESTION:

Are the ongoing evaluations being carried out in-house or via contractor support?

a. If by contractor, could you tell us which company is conducting this effort?

b. Will this contractor also be responsible for the development and implementation of the core system, or will you go out with a new request for proposals?

ANSWER:

The evaluation of the various alternative systems is being conducted by teams of Commerce employees. These teams are conducting both detailed functional and technical reviews of candidate systems. Personnel from the National Institute of Standards and Technology's Computer Systems Laboratory are also working on the project to provide technical advisory services.

We have selected an (8)A contractor, Pilot Research Incorporated, to assist the teams in computer technology related issues of the reviews. Since we are anticipating that the system we select will be from the General Services Administration (GSA) procurement schedule, the primary contractor development and implementation support will come with the package selected. Pilot Research Corporation may, however, continue to be involved in the development and implementation work necessary for the system.

QUESTION:

On page GA-19 of your justifications, you state that the Department established an "implementation center" in FY 1993 related to the development of the core financial management system. Could you tell us more about this implementation center -- what is it, how will it interact with the contractor support for the core financial management system, and how will it be used throughout the implementation of this project?

ANSWER:

We established a CAMS Implementation Center to focus the Department's resources and to reduce the risks inherent in implementing new systems by fully testing the system at the Center before deployment. The Center is staffed with Commerce employees. The mission of the Center is to identify and evaluate the various "off-the-shelf" and other agency financial and administrative management systems to determine their suitability for implementation within Commerce. Once a baseline financial system is chosen, the Center staff will support the modification, integration and Department-wide implementation of all the components of the CAMS. Center staff will develop and maintain the CAMS project master plan and coordinate the activities of various teams and working groups. The Center will manage and oversee the work of contractor support involved in this project. The Center will also serve as a training facility for the new system.

Transfer Authority

QUESTION:

At the time the original transfer proposal and the NOAA reprogramming were submitted, the Committee was told that dire consequences would result if some relief was not provided for NOAA operating programs. What is the current status of NOAA's shortfalls, and what is your office doing to ensure that no anti-deficiency violations occur?

ANSWER:

Nothing has changed with the status or magnitude of NOAA's operating shortfalls since the initial transfer and reprogramming proposals were submitted to the committee in December, 1992. We are currently reviewing options to alleviate these problems and will forward our preferred solution option to the Committees soon. No antideficiency violations will occur before the final solution is implemented.

Management Enhancement

QUESTION:

Another element of the proposed management increase -- 10 positions and $789,000 -- is designated for the Director for Budget, Planning and Organization. What specifically will these resources accomplish, and how is this increase related to the financial management system program increase discussed earlier?

ANSWER:

These positions and funding are part of our overall management enhancement program request. The new Administration brings new ideas for the future and new priorities for many federal programs. This request will allow us to enhance the Department's capacity to develop, implement, and coordinate policies and initiatives which cut across Department organizational lines or involve other government agencies. These resources will be used to develop a Departmental program evaluation capability in the Office of the Secretary, and provide analytical support and policy guidance for the Department in implementing program and management improvements.

We will conduct Departmental policy and program analyses providing guidance and support to the Department's bureaus in implementing Commerce-wide and government-wide systems and requirements. We will identify organizational improvements to effectively accomplish Commerce's missions and the new Administration's priorities. We will measure and evaluate program performance, results and impact, emphasizing "preventive" approaches that establish evaluation criteria for new or redirected programs in the planning stage. We will work closely with bureau program managers and oversee their implementation of comprehensive evaluation methods.

HCHB Tunnel

QUESTION:

What would be the impact of not receiving these funds in fiscal year 1994?

ANSWER:

Receiving the funds in fiscal year 1994 is absolutely critical to the tunnel project. Procurement of materials necessary for the tunnel is scheduled for January, 1994. Construction of the tunnel is scheduled to begin in July, 1994, with completion expected one year later, as part of a strict time-phased plan, hence the requirement for the funds in fiscal year 1994. If funds are delayed, construction cannot begin, and the cost for installing the tunnel after the Federal Triangle Building (FTB) is completed would be prohibitive.

QUESTION:

One of the reasons you cite for the necessity of this tunnel is to provide for more efficient handling of large tractor trailer shipments. How many of these types of deliveries does the Department ordinarily receive during the year, and how are you currently handling these shipments?

ANSWER:

The Department receives approximately 1,920 deliveries at it's Capitol Heights warehouse facility by all kinds of trucks each year. Of that number, it is estimated that about one-third, or 634 trucks that exceed the Herbert C Hoover Building (HCHB) loading dock restriction of 10'6", e.g. tractor trailers, could be routed directly to the FTB if the HCHB had access to a loading dock in that building. Currently, we must receive these shipments at the warehouse, reload the materials on our own vehicles, and deliver to the HCHB.

QUESTION:

Your statement refers to the interaction between the Department's trade promotion and licensing functions and the various trade-related organizations to be housed in the Federal Triangle Building. Do you know what organizations are planning to move into the Federal Triangle Building?

ANSWER:

We understand that the U.S. Customs Service and the Environmental Protection Agency are likely candidates for occupying the Federal Office Building portion of the FTB. We are far more interested in the use of the portion of the building intended for "International" concerns. The District of Columbia Congressional Delegate and the Pennsylvania Avenue Development Commission are still recommending a significant trade-related/economic presence in the building that could include representatives from various foreign embassies. With a tunnel, the "Storefront" activities would be far more accessible to the HCHB, as would Commerce activities be to all occupants of the FTB, whoever they ultimately turn out to be.

Locality Pay

QUESTION:

Your budget request does not include any increases for a FY 1994 pay raise for Federal employees. Are any funds included for a locality pay increase?

ANSWER:

The 1994 budget does not include any funds for a locality pay increase.

QUESTION:

Please provide for the record a chart showing the additional funding requirements for the Department, by bureau, for the increase in locality pay mandated by existing legislation.

ANSWER:

As part of the Federal Employees Pay Comparability Act of 1990 (FEPCA), a locality based pay increase was scheduled to begin in 1994. However, OMB stated there would be no locality-based comparability payments in 1994. The Administration has not provided the Department with the necessary information to develop its 1994 funding requirements.

Also, the Department has been informed that there are several unresolved issues regarding locality pay before the Federal Salary Council. These include items such as the validity of the methodology used in collecting the salary data and problems in defining the geographic boundaries of some of the consolidated metropolitan statistical areas. Also, in performing some of the surveys, the Bureau of Labor Statistics has not been able to find a sufficient number of matches between certain Federal and private sector occupations.

The Department would be pleased to submit its funding requirements as soon as information is available to determine what the locality pay funding amount is.

FTS 2000

QUESTION:

Under the Treasury-Postal Service Appropriations Act, all Federal agencies are required to use the FTS 2000 telecommunications system. How has the implementation of this system impacted the Commerce Department's budget request?

ANSWER:

The FTS 2000 long distance service program has resulted in significant savings, efficiencies, economies and benefits to the Department which have been directly translated into reductions in the Department's telecommunications budget.

QUESTION:

Please provide for the record a chart depicting the FY 1994 savings in each bureau associated with the transition to FTS 2000.

ANSWER:

The following depicts the estimated FY 1994 savings, by bureau, associated with the transition to FTS 2000:

Economic and Statistical Analysis	$19,000
National Oceanic and Atmospheric Administration	4,878,000

Tuesday, April 20, 1993.

OFFICE OF INSPECTOR GENERAL

WITNESSES

FRANK DeGEORGE, INSPECTOR GENERAL

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING & ORGANIZATION

MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. Skaggs. The next item we will consider this morning is the fiscal year 1994 budget request for the Office of the Inspector General in the Department of Commerce. The request is for $18,381,000, which is an increase of $2,576,000 over the appropriation for fiscal year 1993.

We shall insert the justifications submitted in support of this request into the record at this point.

[The justifications follow:]

Exhibit 5

Department of Commerce
General Administration
Office of Inspector General
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget	214	16,105	199	16,105
	less: Dec. 17, 1992 Proposed Transfers not approved (P.L. 102-395)	0	(300)	0	(300)
	Appropriation 1993	214	15,805	199	15,805
GA-45	plus: 1994 Adjustments to base	0	576	2	576
	1994 Base	214	16,381	201	16,381
GA-53	plus: 1994 Program changes	0	2,000	0	2,000
	1994 Estimate	214	18,381	201	18,381

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
GA-49	Inspector General	Pos./BA	214	15,140	214	15,805	214	16,381	214	18,381	0	2,000
		FTE/Obl.	195	15,022	199		201		201		0	
		Pos./BA	214	15,140	214	15,805	214	16,381	214	18,381	0	2,000
	Direct Obligations	FTE/Obl.	195	15,022	199		201		201		0	
	Adjustments to Obligations											
	Recoveries			0		0		0		0		0
	Unobligated balance, start of year			0		0		0		0		0
	Unobligated balance transferred			0		0		0		0		0
	Unobligated balance, end of year			0		0		0		0		0
	Unobligated balance expiring			118		0		0		0		0
	Financing from transfers:											
	Transfer from other accounts			0		0		0		0		0
	Transfer to other accounts			0		0		0		0		0
	Appropriation			15,140		15,805		16,381		18,381		2,000

Exhibit 7

Department of Commerce
General Administration
Office of Inspector General
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	15,851	16,435	17,028	19,028	2,000
Offsetting collections from:					
Federal funds	(829)	(630)	(647)	(647)	
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year					
Unobligated balance transferred					
Unobligated balance, end of year					
Unobligated balance expiring	118				
	------	------	------	------	------
Budget Authority	15,140	15,805	16,381	18,381	2,000
Financing:					
Transfer from other accounts					
Transfer to other accounts					
	------	------	------	------	------
Appropriation	15,140	15,805	16,381	18,381	2,000

Exhibit 8

Department of Commerce
General Administration
Office of Inspector General
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Transfers:	0	0	0
Adjustments:	0	0	(314)
Financing:	0	0	0
Other Changes:			
FTE Adjustment	0	2	0
1993 pay raise			117
Within-grade step increases			188
Administratively uncontrollable overtime			66
Civil Service Retirement System (CSRS)			(63)
Federal Employees' Retirement System (FERS)			125
Thrift Savings Plan			16
Federal Insurance Contributions Act (FICA) - OASDI			40
Health insurance			29
Employee's compensation fund			245
Rental payments to GSA			51
Communications, utilities and miscellaneous charges: Other telephone			8
Printing and reproduction			1
Other services: Working Capital Fund			64
Supplies and materials			2
Equipment			1
Subtotal, other charges	0	2	890
Total, Adjustments to Base	0	2	576

Exhibit 9

Department of Commerce
General Administration
Office of Inspector General
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	AMOUNT
Adjustments:		
Administrative expenses	0	(101)
Pursuant to the Executive Order on Deficit Control and Productivity Improvement in the Administration of the Federal Government, there will be a savings of $101,000 in 1994 for administrative expenses.		
FTE Reductions	0	(213)
Pursuant to the Executive Order on Reduction of 100,000 Federal positions, there will be a savings of $213,000 in FY 1994.		
Other Changes:		
FTE Adjustment	2	0
An adjustment of two FTE is required to support 1993 base program activity.		
Pay raises		117
Full-year cost of 1993 pay increase and related costs. Effective January 1, 1993, Federal employees received a 3.7% pay increase.		

Total cost in 1994 of 1993 pay increase	$467,000
Less amount funded in 1993	(350,000)
Less amount absorbed	0
Amount requested in 1994 to provide full-year cost of 1993 pay increase	$117,000

	FTE	AMOUNT
Within-grade step increases		188
An increase of $188,441 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.		

Estimated number of within-grade step increases	149
Step increases not earned due to turnover (15.0% x 149)	22
Average step above step 1 per separation	2
Average cost per within-grade step increase	$1,556
Gross cost of scheduled step increases ($1,556 x 149)	231,844
Less savings due to separations ($1,556 x 22 x 2)	(68,464)
Subtotal, personnel compensation	163,380
Benefits	25,061
Total, adjustment-to-base	$188,441

	FTE	Amount
Administratively Uncontrollable Overtime		66

An increase of $66,276 is required to cover Office of Inspector General criminal investigation employees for annual premium pay under authority of Section 5545 (c)(2) of Title 5, United States Code (USC) in accordance with 50 CFR & 151 et. seq. This annual premium pay during the first year is a flat 10% of base salary to compensate law enforcement personnel for overtime which cannot be scheduled or controlled administratively.

	FTE	Amount
Civil Service Retirement System (CSRS)		(63)

The number of employees covered by CSRS continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 56.6% in 1993 to 49.4% in 1994 for regular employees and from 9.9% in 1993 to 8.3% in 1994 for law enforcement employees. The contribution rates will remain the same.

Regular:	
1994 ($10,113,000 x .494 x .07)	$349,708
1993 ($10,113,000 x .566 x .07)	400,677
Subtotal	(50,969)
Law enforcement employees:	
1994 ($10,113,000 x .083 x .075)	62,953
1993 ($10,113,000 x .099 x .075)	75,089
Subtotal	(12,136)
Total, adjustment-to-base	($63,105)

	FTE	Amount
Federal Employees' Retirement System (FERS)		125

The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 31.4% in 1993 to 39.5% in 1994 for regular employees and from 2.1% in 1993 to 2.8% in 1994 for law enforcement employees. The contribution rates will remain the same.

Regular employees:	
1994 ($10,113,000 x .395 x .129)	$515,038
1993 ($10,113,000 x .314 x .129)	409,637
Subtotal	105,401
Law enforcement:	
1994 ($10,113,000 x .028 x .273)	77,304
1993 ($10,113,000 x .021 x .273)	57,978
Subtotal	19,326
Total, adjustment-to-base	$124,727

		FTE	Amount
Thrift Savings Plan			16
The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to decrease by 0.2%.			
FERS payroll:			
1994 ($10,113,000 x .423 x .035)	$149,723		
1993 ($10,113,000 x .357 x .037)	133,583		
Total, adjustment-to-base	$ 16,140		
Federal Insurance Contributions Act (FICA) - OASDI			40
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2% in 1994.			
OASDI:			
FERS payroll subject to FICA tax in 1994 ($10,113,000 x .423 x .966 x .062)	$256,206		
FERS payroll subject to FICA tax in 1993 ($10,113,000 x .357 x .964 x .062)	215,783		
Subtotal	40,423		
Other payroll subject to FICA tax in 1994 ($155,000 x .966 x .062)	9,283		
Other payroll subject to FICA tax in 1993 ($155,000 x .964 x .062)	9,264		
Subtotal	19		
Total, adjustment-to-base	$40,442		
Health insurance			29
Effective January 1992, the contribution to Federal employees' health insurance premiums increased by 6.5%. Applied against the 1993 estimate of $450,000, the additional amount required is $29,250.			
Employees' Compensation Fund			245
The Employees' Compensaton Fund bill for the year ending June 30, 1992 is $245,000 higher than the bill for the year ending June 30, 1991. The charges will be reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.			
Rental payments to GSA			51
The GSA estimates an increase for the 1994 rent payment of $51,000.			
Communications, Utilities and Miscellaneous charges			8
The Washington Interagency Telecommunication System (WITS) telephone conversion was installed in the Department, converting the Centex switch to the GSA/WITS switch. The estimated increase in operating cost is $8,000 due to GSA imposed line charges in the Hoover Building.			
Printing and reproduction			1
GPO has provided an estimated rate increase of 3.7%. This percentage was applied to the 1993 estimate of $40,000 to arrive at an increase of $1,480.			
Working Capital Fund			64
An additional $64,000 is required to fund cost increases in the General Administrations's Working Capital Fund.			

	FTE	Amount
Supplies and materials Based on the GDP deflator of 2.4%, the cost of supplies and materials is expected to increase by $1,920 from the 1993 estimate of $80,000.		2
Equipment Based on the GDP deflator of 2.4%, the cost of equipment is expected to increase by $1,200 from the 1993 estimate of $50,000.		1
Total	2	$576

Exhibit 10

Department of Commerce
General Administration
Office of Inspector General
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Inspector General

Subactivity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction	Pos./BA	13	1,175	13	1,296	13	1,362	13	1,362	0	0
	FTE/Obl.	14	1,222	13		13		13		0	
Inspections & Resource Management	Pos./BA	33	2,507	33	2,548	33	2,634	33	2,634	0	0
	FTE/Obl.	33	2,577	28		28		28		0	
Audits	Pos./BA	130	9,005	130	9,452	130	9,789	130	11,789	0	2,000
	FTE/Obl.	116	8,803	120		122		122		0	
Investigations	Pos./BA	38	2,453	38	2,509	38	2,596	38	2,596	0	0
	FTE/Obl.	32	2,420	38		38		38		0	
Total	Pos./BA	214	15,140	214	15,805	214	16,381	214	18,381	0	2,000
	FTE/Obl.	195	15,022	199		201		201		0	

Exhibit 12

Department of Commerce
General Administration
The Office of Inspector General
JUSTIFICATION OF PROGRAM AND PERFORMANCE: INSPECTOR GENERAL

Goals and Objectives

- Prevent and detect fraud, waste, and abuse in Commerce programs and operations, both internal and external.
- Promote economy and efficiency in Commerce operations.
- Concentrate on those programs and operations which have the greatest potential for: identifying fraud; recovering funds precluding unnecessary outlays; and improving management.
- Improve the value of the Inspector General's findings and recommendations to senior Department management.
- Enhance the Inspector General's ability to review areas of high technology, especially ADP.
- Establish a deterrence presence in all external operations of the Department.
- Increase oversight of Federal Managers' Financial Integrity Act related weaknesses.
- Expand the audit requirements of the Chief Financial Officers Act of 1990.

Base Program FY 1994

The Office of Inspector General (OIG) was established in FY 1979 in accordance with the Inspector General Act of 1978. The OIG provides an independent voice to the Secretary and other senior Commerce managers in matters relating to fraud, waste, abuse and mismanagement. The office has the authority to inquire into all program and administrative activities of the Department, including those individuals or organizations performing under grants, contracts or loans.

The work is conducted through audits (management and financial), investigations and inspections. The findings of the audits and inspections are presented to pertinent operating officials and agency heads, who are given the opportunity to review and comment on the reports before they are released in final form. Investigations are referred to the Department of Justice for prosecution where evidence of criminal wrongdoing is uncovered or if civil recoveries are possible. Investigative findings may also be referred to the appropriate agency official for administrative redress.

The Office of Inspector General is headquartered in Washington, D.C., and maintains five regional offices. The Office of Audits has organizations in Atlanta, Denver, and Seattle. The Office of Investigations has organizations in Atlanta and Boulder. As proposed for FY 1994, the OIG will be funded at 214 permanent positions, of whom 62 will be located in the field.

The mission of the OIG is accomplished through the following activities -

Executive Direction	includes the immediate Office of the Inspector General and the Office of Counsel; provides overall leadership and policy direction, including reviews of proposed and existing Departmental legislation and regulations; and provides legal assistance for auditors, investigators, and inspectors.
Inspections and Resource Management	performs inspections of Departmental organizations and provides internal management, personnel, budget, and administrative services for the OIG.

The inspections program was created to expand the coverage of the OIG in the Department of Commerce. Before the program was established in 1982, the OIG had an audit cycle of over 35 years and over 97 percent of the Department had never been visited by the OIG. Inspections have (1) played a major role in minimizing the adverse impact of such a lengthy cycle, and (2) made other valuable contributions to the OIG mission. For example, the inspection program was recently expanded to include special reviews of Commerce ADP operations and resources. The expansion permits the OIG to achieve greater coverage of the Department's vital ADP resources and operations with the OIG's small number of available ADP staff.

Inspections were devised as brief reviews of Commerce units in the field and headquarters or of an organization which receives funds from the Department. They are intended to: (1) gather current information about programmatic and administrative problems while there is still time to correct them; and (2) highlight for Department managers those activities that are being performed well. The inspection team (usually three persons with audit, investigation and/or management analysis background) provides immediate briefings to agency management upon its return from a visit, and a written report is issued shortly thereafter. Significant problems are instantly brought to agency managers or referred to OIG auditors or investigators for follow-up or correction.

An inspection differs from an audit in terms of timeliness, depth of inquiry, and procedures which govern its performance. Because of the freshness of the inspection approach and findings, they have been positively received by Commerce management. Since late in FY 1982, the OIG has conducted over 260 inspections.

Audits performs audits of Commerce operations, significant programs and major system development efforts; trust funds, revolving funds and commercial activities, contracts, grants and loans; and state and local governments.

The Office of Audits' headquarters and regional offices conduct reviews of varying scope both of internal Department operations (management audits and financial audits) and external activities funded by or through the Department (contract, grant, and loan audits, and State and local governments audits).

Management audits look at the economy and efficiency of the Department's activities and the results of its programs. Audits focusing on economy and efficiency determine whether the audited entity is acquiring, protecting and using its resources economically and efficiently (and the causes of any determined deficiencies), and if the entity has complied with laws and regulations involving matters of economy and efficiency. Audits focusing on program results determine the extent to which the intended benefits established by legislation, etc., are being achieved, the effectiveness of the program, and the degree of compliance with laws and regulations applicable to the program.

Financial audits assess the accuracy and reliability of financial information provided for Department trust fund, revolving fund and commercial activities. The audits determine if the reported financial information present fairly the financial position and results of operations of the audited entity. They determine if the entity has an internal control structure that achieves essential internal control objectives and if the entity has complied with laws and regulations that could have a material effect on its financial liability. Major programs of audited entities are analyzed as individual cost centers for costs, benefits and effectiveness. In addition, the cumulative financial data of each entity is analyzed to provide an overall picture of the efficiency of its operations.

Contract, grant and loan audits review the Department's contracts, grants, cooperative agreements, loans, and loan guarantees with entities external to the Department. The audits check compliance with regulations, laws and award terms; adequacy of accounting systems and internal controls; allowability of costs; and how well a project achieved intended results. In the major procurement area, the office provides comprehensive pre-award audit and evaluation information for negotiating contracts. By using more audit and evaluation information, Commerce agencies are receiving better prices in major negotiated procurements.

Finally, State and local government audits are conducted in compliance with the requirements of the Single Audits Act and OMB Circular A-128. These audits provide organization-wide reviews of certain State and local governments that receive Commerce and other Federal funds.

The Office of Compliance and Audit Resolution is responsible for the follow-up on recommendations made in OIG audit, and inspection reports which includes: (1) evaluating agency responses and proposed actions on OIG recommendations; (2) resolving disputes between the OIG and Department management; (3) identifying cases in which recommendations have been ignored or circumvented and recommending specific corrective actions; and (4) maintaining a tracking system for audit and inspection OIG recommendations. The office also conducts a quality assurance program to ensure that OIG activities adhere to established procedures and comply with appropriate standards.

The office is also responsible for the Federal Managers' Financial Integrity Act (FMFIA) of 1982 and OMB Circular A-123 on internal controls systems in order to: (1) provide technical assistance to the Department in its efforts to comply with the FMFIA; (2) evaluate the Department's compliance with OMB Circular A-123; (3) monitor the Department's identification of material weaknesses and subsequent actions taken to correct them; and (4) conduct independent evaluations of internal control systems, as appropriate.

Investigations

conducts investigations of alleged or suspected wrongdoing by Commerce employees, grantees, contractors and loan recipients which may involve violations of criminal laws, civil statutes, Commerce regulations, and employee standards of conduct. The mission of the Office of Investigations is to detect and prevent fraud and abuse involving Commerce funds and programs or activities by Departmental employees, contractors, and recipients of financial assistance.

The OIG fraud investigative effort is generally concentrated on the Commerce programs that fund external activities, such as grants, loans, loan guarantees and contracts. These investigations may result in criminal prosecution, civil fraud litigation, or an administrative action under the Program Fraud Civil Remedies Act.

The Office of Investigations also supports the Department's Office of Federal Assistance and Management Support by conducting name checks on individuals and credit checks on businesses before award of grants, loans or cooperative agreements. The Office of Investigations does not generally handle cases involving personnel abuses, administrative grievances, or minor infractions. The OIG refers them to the appropriate Commerce agencies for action. The OIG monitors these cases through to disposition and provides technical assistance to the agencies as necessary. However, when the alleged infraction involves a senior Department official, or if the alleged conduct is criminal or involves fraud or a major violation of standards of conduct, or is otherwise egregious, the OIG handles the investigation.

The quantified FY 1991 - FY 1994 results and projections of OIG operations are:

(Dollar amounts in thousands)

	1992 Actual	1993 Projected	1994 Projected
Number of Performance Audits	24	40	40
Number of Grant and Loan Audits issued	46	55	55
Number of Grant and Loan Audits processed	372	410	410
Number of Contract Audits processed	94	115	115
Number of Inspections	26	35	35
Number of Investigations	101	105	105
Questioned costs	6,117	---	---
Value of recommendations this period that funds be put to better use	57,994	---	---
Value of reports and recommendations agreed to this period by management	88,859	---	---
Value of financial awards changed as a result pre-award screening actions	9,060	---	---
Value of inspection recommendations this period that funds be put to better use	11,777	---	---
Fines, court-ordered restitutions, and administrative recoveries	2,178	---	---
Indictments	26	---	---
Convictions	22	---	---
Administrative sanctions/actions*	71	---	---

*Includes debarments, suspensions, reprimands, demotions, resignations, dismissals, reassignments, actions to recover funds, new procedures, and policy changes resulting from investigations.

Exhibit 13

Department of Commerce
General Administration
Office of Inspector General
INCREASE FOR 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Audits	POS./BA	130	$9,789	130	$11,789	0	$2,000
	FTE/OBL.	122		122		0	

Chief Financial Officer Act of 1990

This program increase is to provide audit capability for Financial Statements audits ($2,000,000). This request is necessary for the OIG to execute it responsibility for financial statement audits as required by the Chief Financial Officers Act of 1990. This law requires an audit of each financial statement prepared under section 3515 of Title 31, U.S.C. and a report on the audit to be submitted to the head of the agency by June 30 following the fiscal year for which the financial statements are prepared.

The Department has major financial management problems. Systems are outdated, internal control are weak and financial reports are inaccurate and cannot be relied upon for program management and decision making. These problems are deeply rotted and cannot be corrected overnight. It is critical, however, that the nature and extent of these problems be identified so that corrective actions can be initiated. Financial statement audits have proven to be a prime vehicle for this purpose. These audits are comprehensive in nature and focus on major risk areas related to internal controls, financial reporting and management performance. Audit work performed to date at several entities has disclosed material weaknesses in internal controls, violations of laws and regulations and materially misstated financial reports. It is likely we will encounter similar problems at entities yet to be audited, and it is therefore essential that we be able to carry out our audit plan.

We fully expect the benefits of these audits to far outweigh the costs. The primary risk of not performing these audits is that major problems and deficiencies will not be identified and addressed, and that inaccurate, incomplete and misleading information will continue to be produced and relied upon.

Exhibit 15

Department of Commerce
General Administration
Office of Inspector General
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Inspector General
Subactivity: Audits
Program change: Audit requirements mandated by the Chief Financial Officers Act of 1990

	Object Class	1994 Increase
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	2,000
26	Supplies and materials	0
31	Equipment	0
99	Total obligations	2,000

Exhibit 16

Department of Commerce
General Administration
Office of Inspector General
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
11	Personnel compensation					
11.1	Full-time permanent	9,839	10,063	10,144	10,144	0
11.3	Other than full-time permanent	44	50	50	50	0
11.5	Other personnel compensation	180	200	262	262	0
11.9	Total personnel compensation	10,063	10,313	10,456	10,456	0
12.1	Civilian personnel benefits	1,811	1,975	2,380	2,380	0
21	Travel and transportation of persons	523	600	583	583	0
22	Transportation of things	9	12	12	12	0
23.1	Rental payments to GSA	1,251	1,350	1,400	1,400	0
23.2	Rental payments to others	5	10	11	11	0
23.3	Communications, utilities and miscellaneous charges	92	125	126	126	0
24	Printing and reproduction	31	40	40	40	0
25	Other services	1,117	1,250	1,243	3,243	2,000
26	Supplies and materials	72	80	79	79	0
31	Equipment	48	50	51	51	0
99	Total Obligations	15,022	15,805	16,381	18,381	2,000
	Less prior year recoveries			0	0	
	Total Budget Authority			16,381	18,381	2,000

Exhibit 16

Department of Commerce
General Administration
Office of Inspector General
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
Personnel Data					
Full-Time Equivalent Employment:					
Full-time permanent	194	197	199	199	0
Other than full-time permanent	1	2	2	2	0
Total	195	199	201	201	0
Authorized Positions:					
Full-time permanent	212	212	212	212	0
Other than full-time permanent	2	2	2	2	0
Total	214	214	214	214	0

Exhibit 17

Department of Commerce
General Administration
Office of Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	0	112	112	0
	Senior executive service	0	820	820	0
	General schedule	81	9,212	9,212	0
	Subtotal	81	10,144	10,144	0
11.3	Other than full-time permanent				
	General schedule	0	50	50	0
	Subtotal	0	50	50	0
11.5	Other personnel compensation				
	Overtime	62	117	117	0
	SES performance awards	0	45	45	0
	Cash awards	0	100	100	0
	Subtotal	62	262	262	0
11.9	Total personnel compensation	143	10,456	10,456	0

Exhibit 17

Department of Commerce
General Administration
Office of Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits				
	Civil Service Retirement System	(65)	610	610	0
	Federal Employees' Retirement System	128	610	610	0
	Thrift Savings Plan	17	142	142	0
	Federal Insurance Contribution Act	48	273	273	0
	Health insurance	31	481	481	0
	Life insurance	1	19	19	0
	Employees' Compensation Fund	245	245	245	0
	Subtotal	405	2,380	2,380	0
21	Travel and transportation of persons				
	Common carrier	(17)	289	289	0
	Mileage	0	17	17	0
	Per diem/actual	0	241	241	0
	Vehicular	0	32	32	0
	Other	0	4	4	0
	Subtotal	(17)	583	583	0
22	Transportation of things	0	12	12	0

Exhibit 17

Department of Commerce
General Administration
Office of Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
23.1	Rental payments to GSA	50	1,400	1,400	0
23.2	Rental payments to others	1	11	11	0
23.3	Communications, utilities and misc. charges				
	Rental of ADP equipment	0	2	2	0
	Rental of office copying equipment	0	2	2	0
	Other equipment rental	0	11	11	0
	Federal telecommunications system	(7)	36	36	0
	Other telecommunications services	8	68	68	0
	Postal Service by USPS	0	7	7	0
	Other	0	0	0	0
	Subtotal	1	126	126	0
24	Printing and reproduction				
	Publications	0	35	35	0
	Other	0	5	5	0
	Subtotal	0	40	40	0

Exhibit 17

Department of Commerce
General Administration
Office of Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
25	Other services				
	Training:				
	University	0	15	15	0
	Office of Personnel Management	0	18	18	0
	Other	0	29	29	0
	Maintenance of equipment	0	31	31	0
	GSA reimbursable services	0	3	3	0
	ADP services	(15)	41	41	0
	Telecommunications services	0	2	2	0
	Payments to GA, WCF	66	986	986	0
	Other Federal Agencies	(58)	103	103	0
	Contracts	0	0	2,000	2,000
	Other	0	15	15	0
	Subtotal	(7)	1,243	3,243	2,000
26	Supplies and materials				
	Office supplies	(3)	11	11	0
	ADP supplies	2	12	12	0
	Other	0	56	56	0
	Subtotal	(1)	79	79	0

Exhibit 17

Department of Commerce
General Administration
Office of Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
31	Equipment				
	Office machines and equipment	0	10	10	0
	ADP hardware	0	12	12	0
	ADP software	1	24	24	0
	Other	0	5	5	0
	Subtotal	1	51	51	0
99	Total Obligations	576	16,381	18,381	2,000
	Less prior year recoveries	0	0	0	
	Total Budget Authority	576	16,381	18,381	2,000

Exhibit 31

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Office of Inspector General
APPROPRIATION SUMMARY STATEMENT

Appropriation: Office of Inspector General

The appropriation "Office of Inspector General" provides for the detection and the prevention of fraud, waste, abuse and mismanagement of government funds in Commerce programs and operations; promotes economy and efficiency in Commerce operations; and assists the Department in reducing costs and in providing more effective delivery of programs.

The Office of Inspector General performs agency-wide audits, inspections and investigations to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste and mismanagement. In carrying out these responsibilities the office will concentrate on those programs and operations which have the greatest potential for identifying fraud, recovering funds, precluding unnecessary outlays, and improving management.

Accomplishments planned for FY 1994 include:

o Ensure audits are performed of Departmental financial statements in accordance with the requirements of the Chief Financial Officer Act of 1990.

o Improve the value of the Inspector General's findings and recommendations to senior Department management.

o Enhance the Inspector General's ability to review areas of high technology, especially automated data processing systems.

The budget request for "Office of Inspector General" for 1994 is $18,381,000 which includes adjustments to base of +$576,000 and a program increase of +$2,000,000.

Exhibit 33

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Office of Inspector General
APPROPRIATION LANGUAGE AND CODE CITATIONS

Appropriation: Office of Inspector General

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, as amended, $18,381,000.

5 U.S.C. App.3, as amended by P.L.100-504

Section 2 of the Inspector General Act of 1978 (5 U.S.C. App.3), as amended, provides that "in order to create independent and objective units - (1) to conduct and supervise audits and investigations relating to programs and operations of the establishments listed in section 11(2)...there is hereby established in each of such establishments an Office of Inspector General." Section 11(2) of the Act reads, "the term 'establishment' means the Department of... Commerce..."

31 U.S.C sec. 1105, as amended by P.L.100-504

The Inspector General Act Amendments of 1989 (P.L.100-504) amended 31 U.S.C. sec. 1105(a). As amended, this section provides that "the President shall include in each budget the following... a separate appropriation account for appropriations for each Office of Inspector General of an establishment defined under section 11(2) of the Inspector General Act of 1978."

Exhibit 34

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Office of Inspector General
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$8	$10	$10
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and Support services for research and development	0	0	0
TOTAL	8	10	10

The Department of Commerce has established a comprehensive system for identifying and reviewing all proposed contracts and personnel appointments for consulting and advisory and assistance services. The Deputy Secretary is responsible for the overall control and approval of these services throughout the Department. The Associate Deputy Secretary has generally been assigned responsibility to oversee the ongoing operation of the system and to approve requests above the minimum dollar threshold of $25,000.

The Inspector General Act of 1978 authorizes the Office of Inspector General to obtain such temporary technical assistance as needed to carry out the requirements of the Act. Since these needs for technical assistance are so varied and generally for limited periods of time, it would be advantageous to obtain this assistance through contracts and temporary employees rather than full time employees with all of the attendant costs. The services provided include analytical advice and assistance to the Inspector General in the areas of management science; computer science, economics, and industrial, system and software engineering.

Exhibit 35

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Office of Inspector General
PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands)

	1991 Actual	1992 Estimate	1993 Estimate	1994 Estimate
Periodicals	$0	$0	$0	$0
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
TOTAL	0	0	0	0

Exhibit 36

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Office of Inspector General
AVERAGE GRADES AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Average ES Grade	3.75	3.75	3.75
Average GS/GM Grade	12.17	12.17	12.17
Average GS/GM Salary	$46,507	$48,286	$48,730

OPENING STATEMENT

Mr. SKAGGS. Testifying on behalf of this request today is Frank DeGeorge, the Inspector General of the Department of Commerce. Mr. DeGeorge, please proceed with your statement.

Mr. DEGEORGE. Thank you, Mr. Chairman. I will paraphrase my testimony, because I really do want to talk to a couple of issues that have been previously raised.

The request for $18,381,000 reflects an increase of $2.5 million over our fiscal year 1993 budget. The increase includes an adjustment of $576,000 for our current programs, as well as a request for about $2 million to carry out the audit requirements mandated by the Chief Financial Officer Act of 1990. I would point out that our requested increase for maintaining current operations has been reduced by $314,000, as part of the President's effort to reduce personnel and administrative costs.

I would also point out, that we were not as fortunate with OMB. Our request was reduced somewhat.

I am pleased with the President's recently announced financing of a National Performance Review. The review goals of making the Federal Government both less expensive and more efficient and of changing the culture of the Federal bureaucracy is what we at the Commerce IG's Office have been striving for. I strongly support this effort and believe we can play a major role in identifying programs and operations where improvements can be made.

In this regard, we have over the past several years changed dramatically, or have helped change dramatically, in our opinion, the way business is done at the Department of Commerce. For example, loan guarantees are no longer honored automatically. We actually look at them before checks are sent out, and basically have found a considerable number of loan guarantees that did not have to be paid. When our audits disclosed nonperformance on the part of a lender, we often recommend that the guarantee not be honored.

We recently assessed ITA's effort to help U.S. firms meet the export challenges of the 1990s. We identified other units within ITA with export promotion responsibilities and our report outlines redundancies in programs, uncoordinated activities and other problems that needlessly confuse exporters. Because of serious cost, schedule and technical problems that we and others have identified in the acquisition of major systems for the National Weather Service program, NOAA established the Systems Program Office, and immediately requested about twice the staffing that we thought was necessary.

We have pushed and shoved and been quite loud, along with the Department, in supporting a substantial reduction, and staffing for the SPO has been substantially reduced.

ANTIDUMPING AND COUNTERVEILING

At the request of the Chairman of the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, we assessed selected aspects of the Antidumping and Counterveiling Duty Program, which is administered by the Import Administration. Our work disclosed that there is a strong incentive for companies that receive high or punitive duties to continue to manufacture their product and sell to the U.S. through companies that have no duties or lower rates. In this case, the circumvention resulted in a loss to the United States in collectible duties of approximately $12 million.

We have suggested substantial changes and improvements to exclusion rate policies and in the administration of the antidumping program. All of our recommendations have been accepted by ITA, and all have been implemented. I think the changes should make a substantial improvement in the way the program is administered.

CHIEF FINANCIAL OFFICER

Finally, and I think my most important point, I would like to make several comments on a specific program increase. While we have identified 31 funds and activities requiring audits at the Department, we have not received any direct funding for this congressional mandate since 1990, and I want to underscore "any".

We have 120 auditors, of which about 11 have been diverted to financial statement audits at this point in time. I don't see how this can continue. In order to minimally comply, we have directed about $650,000 of our budget or 10 percent of our audit staff, but this is not nearly enough. More redirection, however, would be counterproductive. So as a result, we are simply not in compliance with the requirements of the CFO law.

In fiscal 1992, Department managers agreed to implement OIG audit and recommendations savings of about $62 million. We have the normal number of indictments, convictions, et cetera.

I brought two pieces of paper that have not been part of my testimony, Mr. Chairman, and I think they illustrate the point, if I may take the liberty of giving them to you and Mr. Rogers.

[The information follows:]

ANALYSIS OF $2 MILLION FOR FISCAL YEAR 1994 CFO ACT AUDIT WORK

Agency	Direct costs	Indirect costs	Total costs	Use of $2 million	Comments
NOAA	$750,000	$187,500	$937,500	$937,500	
PTO	420,000	105,000	525,000	525,000	
Census	350,000	87,500	437,500	437,500	
NIST	315,000	78,750	393,750	93,750	[1] 300,000
ITA	224,000	56,000	280,000		(2)
DOC–WCF	168,000	42,000	210,000		(2)
ESA	140,000	35,000	175,000		(2)
EDA	112,000	28,000	140,000		(2)
NTIA	105,000	26,250	131,250		(2)
NTIS	98,000	24,500	122,500	22,500	[1] 100,000
USTIA	70,000	17,500	87,500		(2)
Total	2,752,000	688,000	3,440,000	2,016,250	

[1] Agency fund.

[2] Unable to fund.

Notes.—A. Assumes all work is contracted. Contractor costs are approximately $70 per hour. OIG costs are approximately $40 per hour.

B. Direct costs are costs incurred by contractors. Indirect costs are incurred by OIG for task order development, procurement, COTR and general audit support. Indirect costs are approximately 25% of direct costs.

C. Above schedule is based on all FY 94 resources ($2 million) being used for FY 93 financial statements audits with no work done in FY 94 financial statements audits.

D. Based on survey results to date, full scope audits could be performed at NTIS, DOC–WCF, EDA and NOAA revolving funds. Limited scope audits, including an opinion on the balance sheets, would be anticipated at all other agencies.

I. Negative Effects of No OIG CFO Act Funding

A. FY 92 (REQUESTED $1,425 MILLION; RECEIVED 0)

Planned Audits	*Actual Work Performed*
NTIS FY 91 F/S	Audit performed
NIST FY 91 F/S	Partial audit performed

EDA FY 91 F/S	Audit cancelled; survey performed
PTO FY 91 F/S	Audit cancelled

B. FY 93 (REQUESTED $2,042 MILLION; RECEIVED 0)

Planned Audits	*Actual Work Performed*
NTIS FY 92 F/S	Audit performed
NIST FY 92 F/S	Audit cancelled
EDA FY 92 F/S	Audit cancelled; survey performed
NOAA FY 92 F/S revolving funds	Audit cancelled; survey performed
NOAA FY 92 F/S commercial activities	Audit cancelled; survey performed
DOC–WCF FY 92 F/S	Audit cancelled; survey performed

C. FY 94 (IF $2 MILLION REQUEST IS APPROVED)

Audits Able to Perform	*Audits Unable to Perform*
NTIS FY 93 F/S	Cumulative funding shortfall means we still will be unable to perform required audits of FY 93 F/S of ITA, DOC–WCF, EDA, ESA, NTIA and USTTA
NIST FY 93 F/S	
NOAA FY 93 F/S	
Census FY 93 F/S	
PTO FY 93 F/S	

D. GENERAL NEGATIVE EFFECTS

CFO Act work done during FY 92 and FY 93 has been at the direct expense of programmatic audit activities.

radical Radical reductions in planned audit work have inhibited our ability to identify and correct internal control problems causing DOC financial systems to continue to be categorized as "high risk".

II. Negative Effects of No OFM CFO Act Funding.

A. Planned systems modernization has been delayed.

B. Needs of program and operating managers for timely, accurate financial information have not been met.

C. Existing systems deficiencies inhibit the quality and usefulness of performance information.

FINANCIAL MANAGEMENT

The issue, gentlemen, is that the CFO act directed a number of things. The law said we have to have audited statements. It would be nice if we had statements. It would even be nice if we had accounting systems. A few accountants wouldn't hurt either. We really have no financial management systems in the Department. I don't know where the number $41 million for system development came from. That is not a number, Mr. Rogers, that has been discussed with me, but I will tell you that there are many approaches to getting the financial management systems corrected.

The Department now has a deputy CFO who I think is well qualified. I will accept the number for preliminary planning. However, I think it is very high. I can't comment on it until I see it and have discussions with the Assistant Secretary.

IG AUDITS

At this point we have only done audits of two areas and both have been disturbing. We have audited the National Technical Information Service. However in a budget sense it was zeroed out, it was considered to be a break-even operation. A couple of years ago it turned out to have a $6 million deficiency and was in a bankrupt position. Because this committee funded an $8 million appropriation, we covered the deficiency area. Now NTIS is back in business and has a future.

We have also looked at NIST, and NIST programs are ready to explode dollar-wise. Some of the estimates we have seen increase authorizations up to a billion dollars a year. We have substantial material weaknesses in the NIST accounting systems. We submitted to NIST and to the Department dozens of recommendations for improvement. I could give you many examples.

I am most concerned about the fact that NIST is not recovering total reimbursable costs because they have not properly identified elements of costs. An example is severe depreciation extensions. They depreciate certain assets over 40 to a hundred years. I don't know anything in the way of equipment that will last that long, or even facilities. For the purpose of recovering from other government agencies, NIST seriously understates costs.

It is a big concern to us. They do not reconcile major accounts. They do not recover the cost of outside operations. When you look at NIST, and say 60 percent of it is funded and billed to other third parties that are reimbursable. You can't really look at that accounting and be comfortable with it.

The charts in front of you illustrate what we can or cannot do if we get the $2 million this year for CFO related work. The more pertinent chart in effect shows that since 1990, we requested in 1992 $1.4 and received zero. In 1993 we requested $2.0 and received zero. In 1994, if the $2 million is approved, we can basically have reasonable statements on NOAA, EDA, PTO and the other large agencies we have dealt with in the past.

FINANCIAL MANAGEMENT SYSTEMS

I don't think that implementation over the next five years has to be as expensive as was previously referred to. But I do think that a start is necessary. The Department's plans envision the use of the Corps of Engineers system. The Corps of Engineers system is not yet developed. I do not think all systems have to be implemented over this brief period of time. I think there are other alternatives such as functional implementation. Agency-by-agency payables, receivables, cash; it would be nice if we reconciled cash.

There are real financial holes. As a bare minimum, I would urgently request that this committee fund financial management leadership in the Department. Over the years we have lost most of our senior financial management staff. That is even in policy-making positions. Also it has to give this IG's Office some relief. We cannot pick up five, seven, $8 million worth of financial audit requirements without the $2 million request.

I strongly urge the committee to deal with the financial management structures in whatever way that you want to control it. But we must get accounting systems.

I don't think that we need to do everything right away, but I do think we must start. I will be glad to address any questions, Mr. Chairman.

[The prepared statement of Mr. DeGeorge follows:]

STATEMENT BY

FRANK DEGEORGE
INSPECTOR GENERAL
U. S. DEPARTMENT OF COMMERCE

BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE,
JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

APRIL 20, 1993

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you today in support of the fiscal year 1994 budget request for the Office of Inspector General.

Our request for $18,381,000 reflects an increase of $2,576,000 over our FY 1993 budget. The increase includes an adjustment of $576,000 for our current programs as well as a request for $2,000,000 to carry out the audit requirements mandated by the Chief Financial Officers Act of 1990. I would point out that the budget includes a reduction of $314,000 as part of the President's effort to reduce personnel and administrative costs.

I am pleased with the President's recently announced formation of a national performance review. The review goals of making the federal government both less expensive and more effective, and of changing the culture of the Federal bureaucracy is what we, at the Commerce OIG, have been striving for. I strongly support this effort and believe we can play a major role in identifying programs and operations where improvements can be made and overseeing the implementation of corrective actions long after the six-month review is completed.

In this regard, we have over the past several years changed dramatically the way business is done at the Department of Commerce. For example, loan guarantees are no longer honored automatically. Over the years, we found, too often, that banks failed to execute their fiduciary responsibilities spelled out in guaranty agreements. Banks have not routinely monitored the borrower's use of loan proceeds, or failed to notify Commerce when the borrower's financial condition declined. When our audits disclose non-performance on the part of a lender we often recommend that the guarantee not be honored. Our work serves notice to the banks that they must administer their guaranteed loans as prudently as if they were backed entirely by their own money.

We recently completed a program assessment of the International Trade Administration's (ITA) efforts to help U.S. firms meet the export challenges of the 1990's. In addition to the U.S. and Foreign Commercial Service, we identified other units within ITA with export promotion responsibilities. Our report outlines redundancies in programs, uncoordinated initiatives, and other problems that needlessly confuse exporters. Our March 1993 report contains recommendations to unify and streamline government-wide export promotion activities.

Because of serious cost, schedule, and technical problems that we and others identified in the acquisition of major systems for the National Weather Service Modernization Program, the National Oceanic Atmospheric Administration established a Systems Program Office. However, our evaluation of the proposed staffing for the office found that while it provided important programmatic and contractual leadership, there also were problems. We concluded that (1) the proposed SPO staffing far exceeded what was needed for effective acquisition management, (2) the SPO relies excessively on contractor support, and (3) some SPO staffing functions are inappropriate, unnecessary, or redundant. We recommended that the SPO maintain staffing at current levels until it develops credible staffing plans and that it limit its use of support services contractors.

At the request of the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, we assessed selected aspects of the Antidumping and Countervailing Duty (AD/CVD) Program administered by the Import Administration (IA). The Chairman asked for an audit of certain issues involving synthetic-fiber sweaters shipped to the U.S. from Taiwan, particularly from a certain firm. The AD/CVD program is designed to ensure that domestic industries are not injured by unfair foreign competition in the U.S. market. Unfair competition can result from foreign companies unfairly pricing or dumping their exports in the U.S., or from foreign governments unfairly subsidizing their exporting industries.

Our work disclosed that there is a strong incentive for companies that receive high or punitive duties to continue to manufacture their product and sell to the U.S. through companies that have no duties or lower duties. The lower or no duty company can act as a primary contractor who sub-contracts out all work needed on the given product, thus allowing the companies with higher duties to circumvent the order. This was the case at the Taiwan firm we reviewed.

Also, we found a considerable amount of information indicating that after Commerce excluded the Taiwanese sweater firm from the duty order, that the firm actively worked to circumvent the duty order. The company acted as a sales conduit for other Taiwanese sweater manufacturers that were seeking to avoid the duties being assessed against their products under IA's dumping order. In this case, the circumvention resulted in a loss to the U.S. in collectable duties of approximately $12.4 million. Our February 1993 report contains recommendations directed at preventing and detecting future circumvention of duty orders by severely limiting the open-ended waiver or exclusion orders and the Import Administration has agreed to implement our recommendations.

These are a few examples of our recent efforts to improve the efficiency and effectiveness of programs at Commerce--the mandate the Congress gave all Inspectors General under the Inspector General Act of 1978. When the national performance review is completed, it will be more important than ever for the offices of inspector general to see that the review goals endure, that its objectives are accomplished, and its recommendations are implemented. I urge your continued support of these efforts and the budget presented here today.

Finally, I would like to comment on our specific program increase of $2 million. In passing the Chief Financial Officers Act of 1990, Congress directed that all departments immediately move to audit statements of trust funds, revolving funds, and commercial-type operations. In this cost conscious environment, it is more important than ever to have relevant and reliable financial information. If current and useful data is the prime ingredient for proper decisions, then improved financial management in the federal government is the key to long-term success in controlling government costs.

While we have identified 31 funds and activities requiring audit at the Department of Commerce, we have not received any direct funding for this Congressional mandate. I don't see how this can continue. In order to minimally comply, we have redirected close to $650,000 or 10% of our audit staff for this effort, but this is not nearly enough. More redirection, however, would be counterproductive. It would seriously impair our ability to conduct program evaluations, inspections, investigations, and the management audits that we believe provide significant benefits to the Department. To illustrate the success of these efforts, in fiscal year 1992, department managers agreed to implement OIG audit and inspection recommendations that will result in $62.2 million in savings. During the same period, investigative work resulted in 48 indictments and convictions. I urgently request your support of our increase.

This completes my statement, Mr. Chairman, and I will be pleased to address any questions.

CFO ACT

Mr. SKAGGS. Thank you for your statement and your observations. I suspect your statement about your having decided to be in noncompliance was intended to (and you succeeded) get our attention with respect to your responsibilities under the CFO Act.

Mr. DEGEORGE. I am not alone. I don't mean to imply that this IG is the only one that is not doing everything that is required. The Chairman of the Appropriations Committee a couple of years ago sent a very strong signal about CFO Funding. Generally he suggested that the CFO Act was not to be funded. Some agencies were funded and got money to do statements and financial systems. Many did not. The funding was extremely uneven.

There are other IGs that are in the same position, and there are other financial management structures that are in the same position as the Department of Commerce. It is not a unique situation.

Mr. SKAGGS. The typed sheet that you passed out, is this the sum and substance of your noncompliance, if you will? Or are there other areas that we should be aware of in which you were unable to meet——

Mr. DEGEORGE. No, this isn't all. The plan submitted several years ago to OMB envisioned a five-year approach to implementation, and it basically covered trust funds and other operational facilities, and reimbursable accounts. That is essentially all we are doing. We are not doing total systems or total operations. We have done a relatively small piece of a relatively large agency.

NIST, the first time through, took 7 of our staff for about a year. Now, statements should get better and it should get cheaper. But if you multiply that effort times PTO, Census, EDA, MBDA and the rest of the agencies, it is a very substantial redirection that Congress passed.

If you look at this year, we have basically done two of the five systems that we had originally planned. For the rest we are doing what we call surveys, which is our attempt to look in and say how bad are the accounting systems and what must instantly be changed? Maybe it is accounts receivable or payables in one agency, maybe it is what I call a functional set of operations, maybe it is the inventory of another. We will have at least a handle on the systems we must tell them to fix in order to produce statements over the next couple of years. Reconciliation of cash is a problem. Treasury statements between some agencies and the Treasury Department don't even come close.

Mr. SKAGGS. When you say they don't even come close, what orders of magnitude are you talking about?

Mr. DEGEORGE. Well, the two examples I can think of in NTIS were not as significant. But NIST was very significant. Millions of dollars for an agency that only does about $30 million worth of business. Millions of dollars in difference between the reconciliation at year-end with Treasury.

Mr. SKAGGS. That is an annual number?

Mr. DEGEORGE. Yes. Not to infer that the money has disappeared, merely to say that the responsibilities to account for it and to reconcile the differences puts you in a position of perhaps deferring checks and deferring payments, so costs are transferred into the next fiscal year. This is not the way it is supposed to work.

At NTIS they were using dues and subscriptions accounts as operations funds which an accountant would tell you should only be used as they accrue. They were using all cash that came in the front door in order to stay solvent. That is what resulted in the $6 million antideficiency issue.

FIVE-YEAR FINANCIAL MANAGEMENT PLAN

Mr. SKAGGS. How should we interpret your testimony and comments in the context of Ms. Gutierrez' request for this five-year effort to get the financial management system in place?

Mr. DEGEORGE. With all due respect, sir, I don't think they are consistent. She was asked the question of how much it was ultimately going to cost, and that comes up with a series of criteria. While my staff has worked with her staff, I have not heard any numbers that approach that size. I think as Mr. Rogers pointed out, accountants today desire new systems, and the comprehensive designs necessary to implement these systems may have to be rethought.

Most of the money should be spent on hardware. The problem is the government doesn't have an acceptable accounting system, generally speaking within the Federal government. AMS has a financial system which they have sold to some agencies. American Management Science I think is the name of the company. It is a commercial firm in Virginia, and its system has become the standard in some accounting circles within the government.

The Corps of Engineers is developing a system that is essentially a strong accounting system, but it has a lot of program management aspects to it, because of the large construction business and the large programs they want to manage. We are betting on a system that is yet to be tested. I am not sure that particular system is the system that the Department will ultimately utilize. I would much prefer an approach that deals with the immediate problems functionally. That is a debate we will have to have when I see the DOC system modernization plan.

Mr. SKAGGS. When you see the modernization plan, did you say?

Mr. DEGEORGE. I personally have not seen the plan. I know my staff has had discussions with the Departmental staff. But to my knowledge, my staff has not mentioned numbers in that range to me, so I really cannot comment.

Mr. SKAGGS. Well, let me ask for you to inform the committee when you have had a chance to review the plan and give us your thoughts on its appropriateness in spending levels and staffing.

Mr. DEGEORGE. I will do that as close to possible as I can to your markup session, sir.

Mr. SKAGGS. That would be very helpful.

[CLERK'S NOTE.—Subsequent discussions with the Department indicate that it will be sometime before they can review the updated Administrative Management Systems Modernization plans and provide an evaluation of spending levels and staffing. The Commerce Department will provide written comments to the Committee as soon as possible.]

NATIONAL PERFORMANCE REVIEW

Mr. SKAGGS. Your statement mentioned the President's formation of this national performance review undertaking. How do you see your role in that? What difference will it make in what you are able to accomplish?

Mr. DEGEORGE. Well, the first question is the roles, sir. When the Vice President announced the initiative, he indicated that they were going to have the involvement of what they call auditors as well as others. That has basically been defined to include Inspector General staffing. Since we already do a lot of work in these areas (evaluative work, review work, audits), they are taking what I consider to be the proper steps to involve the Inspectors General.

The Vice President met with all the Inspectors General to discuss the process, and encouraged us all to work together and be active participants in the process.

The Department has met with the Vice President as well. I have been requested and have detailed one of my staff to work with the Vice President's staff in direct support of the effort. The Department under the chief of staff's auspices is working to develop an in-house process which will review Commerce processes and make recommendations to the Vice President.

I have been asked to sit on the steering committee that will review the process of determining what and how we would make recommendations. Inclusion of the Inspector General will have a very positive effect. The Department has a monumental job to do in six months. It will depend on how deep you get into the process and how much program decisions process decisions.

What I am trying to say is, if you decide that you are going to go in one direction or another programmatically, you will usually want to reorganize to do so. Reorganization has a great deal to do with, as far as I am concerned, ultimately what the cost of operations will be.

There are many areas that have to be looked at. Staffing. I think the Government has to find a better way to deal with personnel-hiring, firing, the inflexibility of civil service. I also think the Government has to find better ways to deal with space. My personal view is GSA does not do a good job of working with agencies in that area. The Government also has to find a better way to deal with procurement, grant administration, et cetera. There are many other administrative processes that tie into the accounting process that also need correction.

The Department was quite active in its contract reviews a while back, and both the IG and the Department worked together. We found that there are substantial problems in program and administrative procurements. I have yelled loudly and often about how poor a job I think we do in systems management.

The Weather Service modernization, the Patent and Trademark Systems modernizations, these are all very expensive. When the agency takes the wrong turn, makes the wrong decision, fails to review systems requirements, it cost hundreds of millions of dollars. Our satellite program is a perfect example.

Leadership is important, trust is important, knowledge is extraordinarily important. We must find a way to get better information as we make program decisions.

Our office is active in the sense of looking at programs. I personally think it is important to do strong evaluative work. Look at the trade promotion evaluation work that we have done recently. Look at the cable review process that we did recently. Look at the Weather Service modernization work we have done. We have many suggestions as to how to make Government run better.

It does no good at all in my judgment to look at a program five years after it has happened and say you blew the technical decisions. If you can't get at the processes during the requirements phase, you lose. If we are going to go through the changes, the program explosions in NIST—hundreds of millions of dollars in increases—if we are going to finance the NTIA increases in telecommunications, we better be watching where the program and processes are going.

There are three elements I really want to have the committee think about. Administration management, if it is the FARB and what was discussed previously with committee staff, is not nearly as important as deciding what you are going to look at. We should be looking at individual grants as much as the effectiveness of the program.

Does the program work? In effect, do we have systems requirements? Can we assess how the work is done? We must get agencies to do the management job. We must push Department administrators to survey and oversee the work.

All too often it is only when we run out of money that we evaluate the program. We don't tend to look at the process. I think that is what this President and Vice President are trying to do. And I sure think that the IG should be there trying to point them in the right direction.

ACCESS TO THE SECRETARY

Mr. SKAGGS. Do you have the access you need, based on at least your earlier experience, to your Secretary?

Mr. DEGEORGE. I have met with Mr. Brown and the Deputy Secretary Designee and continue to do so. I have met with the previous secretaries and Deputy Secretaries whenever I feel it is necessary. Specifically, in the past, I met with the Secretary once a month or so, to tell him or her what I though was important for them to know. I met with the Deputy Secretary once a week. That started with Deputy Secretary Bud Brown and has continued to this date. I tell them what I think they must know and the problems they must deal with.

Up to now, I have regularly met with the Chief Financial Officer/Assistant Secretary for Administration in the last couple administrations. I hope that will continue. I encourage the Deputy Secretary to concentrate on the role of the general manager of the Department. That is the prime role of the Deputy Secretary as I see it. All too often the Deputy Secretary assists the Secretary and doesn't spend enough time acting as a general manager. You must have someone overseeing agencies.

DOCUMENTS ON CFO

Mr. SKAGGS. By the way, the documents that you distributed to us, without objection, will be made a part of the record at the appropriate point when we were discussing them.

ITA ACTIVITIES

Mr. SKAGGS. You mentioned in your statement your assessment of the ITA program, and you concluded that activities of ITA should be carried out under USFCS.

Mr. DEGEORGE. Trade promotion I think should be the responsibility of USFCS.

Mr. SKAGGS. Are there savings that accrue there?

Mr. DEGEORGE. I would think so.

Mr. SKAGGS. Any idea how much?

Mr. DEGEORGE. No, we haven't added up the staff. We have pressed ITA hard to agree but they have not to date. Staffing redundancies could number in the dozens, but I don't think it is fair to make that judgment until they have either decided that this Secretary does or does not want to change the premise. If the Secretary does not agree redundant as they are the way they are, then there would be no savings.

Mr. SKAGGS. Let me recognize Mr. Rogers.

REQUEST TO OMB

Mr. ROGERS. What was your request to OMB?

Mr. DEGEORGE. About $4 million more.

Mr. ROGERS. What particularly did OMB refuse to fund?

Mr. DEGEORGE. It is somewhat unclear to me as to where the reduction was directed. I would presume the reduction was to be made in the audit statements area. Remember, we initially proposed our budget to President Bush and it has been revised by this administration. Essentially the $4 million requested I thought would bring us back up to plan on accounting statement audits. I am not positive where it was cut. But I will give OMB credit.

Mr. ROGERS. Well, what impact will that cut have on your office?

Mr. DEGEORGE. If you look at the schedule that I handed you, sir, the long handwritten schedule, it says that we are still unable to do the statement audits within the time frames that we planned for ITA, ESA, EDA, NTIA, USTTA and the Department's Working Capital Fund.

I think our present approach is probably a responsible way to handle the work. Our plans suggest that we will complete the big agencies over the next year, through 1994. This will leave some of the smaller agencies, including the departments' working capital fund and other areas uncompleted. The "comments" column all the way to the right are the programs we would be unable to complete, unable to fund the work.

ADMINISTRATIVE AND PERSONNEL SAVINGS

Mr. ROGERS. Now, your request shows a decrease of $314,000 to meet the President's order for administrative cuts.

Mr. DEGEORGE. That is our share.

Mr. ROGERS. Where will you realize those cuts?

Mr. DEGEORGE. Sir?

Mr. ROGERS. Where will you realize those cuts?

Mr. DEGEORGE. Mostly other audit responsibilities. Management audits, inspections, investigations, generally across-the-board. It is equivalent to maybe three, four, or five people.

1994 BUDGET REQUEST

Mr. ROGERS. Now, this extra $2 million that you are requesting, to implement the CFO Act, will that money be used to hire outside contractors to do those audits?

Mr. DEGEORGE. Unfortunately, yes. To implement the Act, I will be glad to get the money anyway I can. I will be glad to pay outside public accountants $70 or $80 per hour. Our staff could do the work for $30 to $40 per hour if we had more full-time employees. This is one of those cases where in effect it would be more effective to give us direct staffing. I would be glad to accept the staffing (FTE) in lieu of using contractors and let me spend it at the lower rate and the request could be reduced.

But the President is planning staffing reductions over the next several years—the hundred thousand staffing reductions that the President has discussed over the next three or four years. There is a strong emphasis from OMB on downsizing, to not to add additional staffing. But it is clear to me, as the note says on the bottom of this sheet, that I think our estimates are that it is $70 an hour for contractors against $40 an hour for on-staff with all the overhead.

Mr. ROGERS. Well, if you were able to do those audits inhouse——

Mr. DEGEORGE. You could save roughly half the money.

Mr. ROGERS. So you could do $4 million worth for $2 million?

Mr. DEGEORGE. If we had the staff, we could come a lot closer, yes, sir.

Mr. ROGERS. So that would be a way to make up for OMB's refusal to fund the extra $2 million?

Mr. DEGEORGE. Yes, sir, if we could get staffing as FTEs through the process, and I presume the committee has the power to write that into the appropriation.

NATIONAL PERFORMANCE REVIEW

Mr. ROGERS. Did I hear you say that the Gore commission—what is it called?

Mr. DEGEORGE. Well, it is the President's initiative, the National Performance Review. That is the terminology they use.

Mr. ROGERS. Is that the President's initiative to——

Mr. DEGEORGE. It has also been called Reinvent Government, yes. The effort is to, in effect, look at all processes, all programs and evaluate their need, their placement as to whether they should continue to be Federal Government or might more properly be State programs. The review as I understand it, is to look at everything we do and to try to assess whether we can stop doing some things or how we can be more efficient in what we do. It is all intended to empower employees; to have more responsibility delegated to the staffs.

It is really built on the thesis of all industry, all large non-Government entities have looked at themselves and determined that they have a lot of people in middle management. Any agency has a lot of ways that we can look at the way we do business, particularly with an emphasis on how we support our clients. In Government I think it is difficult to identify the clients, maybe it is all of us.

But the thrust is to look at what we are doing and decide how it can be done more effectively.

Mr. ROGERS. Did I hear you say you are on the executive committee, so to speak?

Mr. DEGEORGE. The Department has set up a steering committee on which I have been asked to participate. In addition all Inspectors General and Departments have sent what we call our evaluative audit reports to the Vice President's steering committee for their review.

FINANCIAL ACCOUNTING SYSTEM

Mr. ROGERS. Well, doesn't it—I think you have been saying this, but am I gathering from your testimony that you think it makes eminent sense that there be a Government-wide financial accounting system?

Mr. DEGEORGE. No, I am not saying that, sir.

Mr. ROGERS. Okay.

Mr. DEGEORGE. What I am saying is that we need individual accounting systems. I don't think there has to be a Government-wide accounting system; I don't even think there has to be a Commerce-wide accounting system. More basically, I think there have to be accounting systems that work. They don't now.

I don't think there is much of a need for the Department to impose a single system. I think there has to be some kind of a conversion system to get that data to a common base to the managers at the senior level. I would be more than happy to settle for this in the interim. Completed accounting systems you come up with at the Commerce Department is going to take a decade even working with individual existing accounting systems.

What we are trying to do in our surveys is look at the systems function by function. Our operating premise should be let's put our hands on what immediately has to be fixed, let's move to functional responsibilities of systems. One by one we can tie the systems together at a later date since that is going to change many times.

What I have also said is I think it may be terribly premature to select a system, any system, today. There are other alternatives, and I think we ought to look at all of those as we proceed.

What I am not saying, Mr. Rogers, is that the Department does not need to make substantial investments in those areas in the way of people, leadership, and the evaluation of accounting systems to determine where we should go. I think if this committee says not to do anything, that it would be a mistake.

If the committee concludes that we should fund enough to be sure that three to five years down the road we should have important working systems, I would strongly endorse that approach. We also need the staffing it takes to lead that exercise.

Mr. ROGERS. Well, shouldn't all departments be getting this kind of directive from the Office of Management and Budget?

Mr. DEGEORGE. They are. There is a very strong Financial leadership at OMB that started with Mr. Hoalsell who was the Deputy for Management. The designated deputy for management, Phil Lader, feels just as strongly and I have had a personal discussion with him about the need for accounting systems. They have several senior staff people in OMB leading this effort.

OMB is pushing hard, I think in many cases to meet the objectives of the CFO Act. They have a strong presence in the sense of leadership in OMB, the careerists who have remained. But mandating it, per se, is not going to get it done.

We don't have throughout Government the Financial capabilities, and the leadership at the agency and Department level.

Mr. ROGERS. Well, we look forward to your evaluation of the request for the new system.

Mr. DEGEORGE. Yes, sir. I will do that immediately.

[The information follows:]

[CLERK'S NOTE.—Subsequent discussions with the Department indicate that it will be some time before they can review the updated Administrative Management Systems Modernization plans and provide an evaluation of spending levels and staffing. The Department of Commerce will provide written comments to the committee as soon as possible.]

EXPANSION OF EXISTING PROGRAMS

Mr. ROGERS. Now, as you know, the President's budget includes significant expansions for some existing programs, EDA, NIST, for the Advanced Technology Program, as well as the new Information Infrastructure Program. Do you believe the existing programs will be able to handle the dramatic infusion of new funds being requested?

Mr. DEGEORGE. Yes, I do, with a caveat. I think that it would be a mistake to fund the EDA programs with the $130 million or so that has come from Defense without confirming the types of awards. I think that it can be handled, that the agency has moved materially ahead over the last three or four years and has the capability to administer those programs. However, there are some problems.

We have been doing some evaluative work as to the nature of decisions for funding on defense relocation. The Congress' desire is to support base closings, and I think the process ought to be kept on track to effectively deal with actual base closings. The new EDA funding, however, should not just be an add-on to EDA's normal public works programs.

I think basically what the process calls for is an evaluation of what we have learned in the last year or two as to how the money can be effectively spent for base closings. What works and what doesn't. The additional funding should not be used as a mere supplementation of EDA's funds.

As far as the other programs, the Advanced Technology Program and NIST, is quite large. I would suggest that we are getting into new areas. As an example, our suggested authorization would in effect, make venture capitalists of the Government. We are going to be program sponsors, we are going to be partners. We are in areas that the Government has never been before. If we do not provide the administrative mechanisms, and the evaluative mechanisms to confirm what works, or isn't done well, then I think we may stumble. We may well wind up with a lot of money going to a lot of Government contractors and a lot of educational institutions without the appropriate accountability that goes with accepting the Federal dollar.

I am very concerned that we have the mechanisms in place to deal with the controls of those processes.

Mr. ROGERS. What would it take?

Mr. DEGEORGE. What would it take? Well, you are going to potentially authorize up to a billion dollars. It depends on how NIST designs the programs. Capable program and audit staff need to watch the implementation of the programs. It will involve a review of the processes. It will require, I hate to say this, more staff for the IG to watch the store. It will take more policy and management staff people in the Department, properly so.

One program would suggest that the Government be a venture capitalist. I would like to be certain that the Government participates wisely in these types of investments and any return that flow from it.

So we need people in NIST that really are looking at the processes and the contracts. You need reports, you need evaluations, you need accountability, all the processes that you are running as if it were your own private program. I think it is a mistake to put large sums of money into these programs without evaluative and management oversight tools.

You must do it at NIST, in the Department, in the IG's Office as well. The Department has proposed $60 or $70 million in NTIA programs; we have hundreds and hundreds of millions being proposed to add to NIST programs. We have over $100 additional million in EDA with the Defense add-ons, and I must remind you, gentlemen, that in effect EDA has been resurrected too in this budget process. It now is back in existence full speed, and it will be spending its normal $200 million, plus another $100 million from Defense, and I don't know how well.

Mr. ROGERS. Thank you very much.

IG/GAO RELATIONSHIP

Mr. SKAGGS. Just a couple of more questions. You alluded to your watchdog responsibility within the Department, and we think of GAO as our watchdog operation. I wonder how the watchdogs get along with each other?

Mr. DEGEORGE. Well, it depends on who yells at who.

Mr. SKAGGS. From your point of view.

Mr. DEGEORGE. From my point of view, it works well. I know most of the GAO section leaders that deal with our programs. We try not to work in the same areas at the same time. We don't always succeed. We generally check our plans in advance if we are going into new initiatives.

I have nothing but praise for GAO. I think they ought to do more and more program evaluation work.

We work for you, gentlemen, as I have tried to portray. We have two bosses, Congress, including this committee and all the other committees—Appropriations, Authorization and Oversight as well as the Department.

The authorization language specifies that we work for you as well as for the Secretary. GAO, only works for you, so they don't have to also support the Secretary, but I think it works very well. I have encouraged GAO to spend more, not less, time looking at program evaluations.

HOTLINE NUMBER

Mr. SKAGGS. And I don't know whether you have one of the infamous 800 numbers with which to receive suggestions, and my question really isn't about that——

Mr. DEGEORGE. Yes, sir, we do.

Mr. SKAGGS. I would be curious about some success stories, and you may want to submit this for the record, of suggestions for getting at ways to improve management efficiency that have come to the IG's attention through that process. I think we have a kind of mystical feeling about it, and I would like to have that made concrete, pro or con.

Mr. DEGEORGE. Surely.

[The information follows:]

In the first two weeks after our 800 number was published, we received approximately 796 calls. Of these calls, (1) 170 calls were categorized as "Programs" such as calls relating to the North American Free Trade Agreement, eliminating the "800" hotline numbers, elimination of other federal agencies, etc.; (2) 125 calls were categorized as "Functions" such as calls relating to military base closings, reforming medical care, military spending, streamlining Department of Commerce, etc.; (3) 71 calls were categorized as "Outside Executive Branch Purview" such as calls relating to cuts to federal spending, cuts to Congressional salaries and perks, cuts to federal salaries and perks, cuts to security for former presidents, etc.; (4) 225 calls were categorized as "General Recommendations" such as cut foreign aid, do not raise taxes, subsidize U.S. industries, increase "sin" taxes, opposed to "sin" taxes, opposed to open immigration laws, etc.; and (5) the remaining calls of 205 were directed to other Federal agencies.

We are still assessing the contents of the calls for proper disposition.

OIG HOTLINE

Mr. DEGEORGE. There was originally a 1000 percent increase. In the past, hotline calls have been an important source of our work. Yes, I will be glad to send it up to you.

Mr. SKAGGS. It is not window dressing?

Mr. DEGEORGE. It does work, and I think all IGs would tell you the same. We do get our share of cranks. After our hotline number was published, we did get all kinds of interesting comments, pro and con. But I think the work of the hotline is essential.

UNPLANNED TIME-CRITICAL ISSUES

Mr. SKAGGS. Last year, you testified about the difficulty that you were facing in dealing with opportunistic situations, unplanned, time-critical issues. Does that continue to be a concern? How do you keep something in reserve to deal with the things that you can't really plan for specifically?

Mr. DeGeorge. Not very well, given total responsibilities. Mr. Dingell has discovered our staff and he doesn't do anything halfway, as you know. We have requests from the House Operations Committee, the Senate Governmental Affairs Committee, the Appropriation Committee and the Authorization Committee.

I spend a lot of time talking to the staff here and the staff in the Senate. We plan probably 75 to 85 percent of our work, and we probably wind up doing—I know my staff is going to hate me for saying this, 50 or 60 percent of what we plan to do, because things change. It is difficult to predict.

Mr. Skaggs. It sounds like the ratio in my office.

Mr. DeGeorge. Things happen. You know, you can't run away from other specific problems. Can I give you one example?

Mr. Skaggs. Please.

Mr. DeGeorge. I did not think we would still be dealing with the NOAA building in Boulder at this point in time.

Mr. Skaggs. Neither did I.

Mr. DeGeorge. We have worked very closely, as you know, with your staff and with the staff in Commerce and the staff in NOAA and the staff in Denver because I felt from the very beginning that it was an essential and smart thing to do. It is still not accomplished. Some things never die. I hope this one lives.

I don't know where the latest environmental hearings go. But we constantly talk to the staff and they try to help us out. Some things just don't go away. So the agenda expands.

I have heard a couple of IGs say recently, and I would have to agree with them, that this is a fun job if you don't let it get to you.

Mr. Skaggs. If what?

Mr. DeGeorge. If you don't let it get to you. Where else can you be independent, truly independent, look at what you think is important to look at, and then turn out to be right so often? Wrong most of the time by some of our critics. But it is a well thought-out thesis and it works well, sir.

Mr. Skaggs. I think that statement is probably an appropriate benediction to your appearance.

Mr. DeGeorge. Thank you very much.

Mr. Skaggs. We thank you very much for your work and your staff's. Thank you.

[The following questions were submitted to be answered for the record:]

QUESTIONS FOR THE RECORD FROM CONGRESSMAN SKAGGS

OFFICE OF THE INSPECTOR GENERAL

National Performance Review

QUESTION:

You also mention the possibility of overseeing the implementation of corrective actions identified by the national performance review. Are you requesting additional resources to carry out this activity, or will you be able to accomplish this mission within your base funding?

ANSWER:

No, we are not requesting additional resources for this because we do not know what may come out of the national performance review.

Weather Service Modernization

QUESTION:

This Subcommittee is well aware of many ongoing concerns with the National Weather Service's management of the weather modernization program, and you have highlighted your concerns in previous years, as you have again in your testimony today. Other than the Systems Program Office (SPO), which you mention in your statement, what other concerns do you continue to have with the implementation of weather service modernization?

ANSWER:

a) As a result of the modernization, NWS will substantially reduce the number of field offices as the new technology systems are delivered. The opening and effective, economical operation of field offices receiving NEXRAD radars depends on the transfer of positions and staff from those offices not receiving the new technology systems and targeted for eventual closure. However, Public Law 102-567 requires NWS to keep the older offices open to perform unnecessary liaison functions after forecast and warning functions have been transferred to NEXRAD field offices. The liaison function will already be handled more effectively by the NEXRAD offices. The commissioning process established by law will ensure that necessary services to affected communities will not be degraded. Since the remaining staff at the old offices are expected to be retained for extended periods of time, we estimate that during the modernization period the NWS will spend over $50 million to unnecessarily keep the old offices open and maintain duplicative liaison positions. The fiscal years with the greatest duplication of costs will be 1995, 1996 and 1997.

We believe that Public Law 102-567 should be amended to permit NWS the flexibility to close old offices sooner, thereby freeing-up staff and other resources that can be put to better use in the NEXRAD field offices.

b) NWS will incur substantial staffing costs in modernizing its weather field operations. Consequently, NWS management needs to carefully monitor and control these costs as the modernization progresses. In 1988, the NWS modernization was projected to cost taxpayers under $2 billion, but now is estimated to more than double to $4.6 billion. When the systems were initiated, their estimated deployment was scheduled to be completed by the end of October 1994, but will not be completed until at least 1998.

In addition to systems costs, areas in which NWS management needs to carefully evaluate costs include the (1) policy used for Permanent Change of Station (PCS) moves, (2) competition areas to determine PCSs, (3) need to back-fill positions immediately, (4) hiring, training, and integrating staff, (5) increase in the average grade of weather office field staff, and (6) length of time and number of personnel required to open a new field office. We are continuing our review of these issues.

c) The Advanced Weather Interactive Processing System (AWIPS) development contract was awarded last December. There have been some start-up problems associated with the AWIPS contract including the need for the contractor to better define its systems and software engineering process and the need to carefully select and manage the software products that will be incorporated into the system. Our most serious concern is that the contract contains an incentive to accelerate the schedule by up to six months. We believe that schedule acceleration is not achievable, is counterproductive, and should not be pursued.

QUESTION:

You specifically mentioned in your statement the Systems Program Office (SPO) under NOAA. You state that the proposed staffing for the SPO is excessive and that they rely too heavily on contractor support. What types of services is the SPO contracting out. What would you consider to be an ideal staffing level for the SPO?

ANSWER:

SPO contractors provide support in the following areas: program management, program planning, cost and budget analysis, schedule management, performance measurement, risk assessment, software risk management, systems engineering, software engineering, test and evaluation, system acceptance, and ship specification and design. The SPO also uses contractors to perform site surveys and environmental assessments, provide architectural and engineering services and construction management, and support site acceptance. Finally, the SPO uses contractors to develop and maintain software specifications and algorithms which are being furnished to the AWIPS development contractor. We have found no justification for the division of responsibilities between government employees and support contractors for the SPO. We believe that government personnel should be used wherever possible, and the services of support contractors should be minimized.

We believe that an appropriate size for the SPO, including program offices, should be about 300 people, including support services contractors. In our December 21, 1992 inspection report entitled, *Staffing, Budget, and Functions of the Systems Program Office* (SED-4643-3-0001), we noted that the SPO's lack of workload analysis resulted in arbitrary and excessive staffing and budget requests. We recommended that to better determine staffing requirements, the SPO should develop a staffing plan based on a bottom-up analysis of the work to be performed by the program and executive offices. The plan should determine the specific tasks to be performed and the rationale for use of support contractors. To date, however, the SPO has not done this.

Antidumping and Countervailing Duty Cases

QUESTION:

You recently completed an audit of certain issues related to a specific antidumping/countervailing duty (AD/CVD) case with a company from Taiwan. Do you feel that this case is representative of the majority of AD/CVD cases being investigated by the Import Administration.

ANSWER:

Our recent audit report disclosed that the Import Administration's (IA) AD/CVD orders were being circumvented by Taiwanese synthetic sweater firms and that sales to U.S. markets were escaping the duties that should have been assessed. We do not know the overall extent of AD/CVD circumvention but available information indicates that circumvention, in one form or another, occurs with some frequency. Our staff has found that IA lacks a systematic, aggressive approach for monitoring available information and looking for indicators of circumvention.

Further, we have found that substantial weaknesses exist in IA's procedures for conducting on-site verifications of the questionnaire responses submitted by foreign firms and used by IA in making AD/CVD determinations. The current process does not go far enough in attempting to detect deception and evasion.

QUESTION:

What specific recommendations can you make to the Subcommittee on correcting the problems you see, or will the AD/CVD issue continue to be unresolved until there is an overall trade policy determined by the Administration?

ANSWER:

Our current audit coverage is designed to assess a range of issues relating to IA's capacity to administer the AD/CVD laws. We expect this work to be completed during the summer. To date, our results indicate that IA needs to implement a number of improvement actions to provide for more effective and efficient operations. Our recommendations will address such matters as improving the verification process, identifying suspected cases of circumvention, improving coordination and interchange of information, providing for better management of automated processing resources, and ensuring that staffing levels and capabilities are appropriate. Overall, our recommendations are directed at strengthening enforcement of current AD/CVD laws and policies.

Unplanned and Time-Critical Issues

QUESTION:

How much is included in this budget request for these "quick turnaround" type projects? What amount was actually devoted to such types of projects in FY 1992 and what is your estimate for FY 1993?

ANSWER:

We normally reserve about 25 percent of our available resources for unanticipated work. Our unanticipated work results from allegations received, leads from other projects, and special requests from the Department and Congress. Sometimes this unanticipated work is "quick turnaround" while more recently the work has resulted in a significant commitment of resources. For example, the request this fiscal year by the Energy and Commerce Committee regarding the Department's Antidumping/Countervailing Duty Program required significant staff resources. In cases like this, we must reprogram audit resources. In fiscal year 1992 about 20 percent and for the first half of fiscal year 1993 about 30 percent of our audit and inspection work was unanticipated.

Economic Development Representatives

QUESTION:

At last year's hearing, you and Chairman Smith discussed your concerns over the Subcommittee's earmarking of the number and location of economic development representatives (EDRs) in the Economic Development Administration appropriation language. The Administration is now requesting funding for EDA to continue and expand its operations, and have included sufficient funding for 49 EDRs. Would you care to comment on this request for the Subcommittee?

ANSWER:

We believe that the appropriation language has been too restrictive because it has tied the hands of EDA management. In my opinion, this language should not be in the appropriations bill. In the past, EDA management has not had the flexibility to place EDRs where they are most needed so EDA can accomplish its program objectives in the most effective, efficient, and economical manner. States and U.S. territories have established economic development agencies and EDA provides economic development districts with planning funds for the development of projects. EDA needs to evaluate the abilities of these various planning organizations and EDA's current workload so it can determine whether the EDRs are all needed and for those that are needed, EDA should determine where the EDRs should be placed to most effectively facilitate the prompt processing and award of the most needed and productive grant assistance. I strongly suggest the restrictive language be removed. Leave the specific placement of staff to EDA management as needed.

QUESTION:

EDA is requesting additional resources for FY 1994 to "reinvigorate" its staff and update its computer systems. Would you care to comment on their request for these funds, and can you recommend any additional changes for the organization?

ANSWER:

While we have not reviewed in detail EDA's FY 1994 request, the funds being requested for "reinvigorating" EDA's staff are for the hiring of 4 FTE and for providing additional funds for project development and monitoring. Given the additional funding EDA expects to receive from DOD and past lack of monitoring of ongoing projects because of insufficient funds, this request seems reasonable.

Regarding the request to update computer systems, we also believe the request to be reasonable. Although we have not reviewed this request in detail, we do know that the current hardware and software are outdated and inefficient. In our opinion, it would make sense to upgrade.

We do have some suggested organizational changes within EDA given the budget request that has gone forward. Since EDA's funding and authority for its direct loan and loan guarantee programs has been discontinued and the grant programs are increasing, we suggest that EDA consider transferring some of the staff from the loan and loan guarantee work to perform grant administration activities.

Minority Business Development Agency

QUESTION:

For the past several years, you have been working with the Minority Business Development Agency (MBDA) to help them overcome some management problems they were experiencing. The Secretary has now indicated that he wants to strengthen MBDA. Will you be working with the Agency to assist in this initiative?

ANSWER:

Yes. MBDA has made significant progress over the last couple of years and we will be available to help MBDA make further advances toward accomplishing its goals in the most effective, efficient, and economical manner.

QUESTION:

Do you have any continuing concerns with MBDA? Are you currently working with the management at MBDA to address those concerns?

ANSWER:

Yes, we do have some concerns with MBDA. We believe the regional management structure is not very effective. MBDA needs to strengthen its evaluation and monitoring of the operational performance of the business development centers within their geographic areas of responsibilities. This issue has been repeatedly discussed with MBDA management.

TUESDAY, APRIL 20, 1993.

MINORITY BUSINESS DEVELOPMENT AGENCY

WITNESSES

LORETTA YOUNG, ACTING DIRECTOR
HAROLYN BOULWARE, BUDGET OFFICER
GEORGE PARISH, EXECUTIVE OFFICER
ERIC MOLL, CHIEF COUNSEL
ROBERT HOOKS, CHIEF, RESOURCE DEVELOPMENT
LUIS ENCINIAS, ACTING, ASSOCIATE DIRECTOR FOR OPERATIONS
GLENN CLARK, BUDGET ANALYST
MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SKAGGS. We will move now to the Minority Business Development Agency.

Good morning.

The final item we will consider this morning is the fiscal year 1994 budget request for the Minority Business Development Agency of the Department of Commerce. The request is for $45,381,000, which is an increase of $7,492,000 over the amounts appropriated to date for FY 1993.

We will insert the justification material submitted in support of this request into the record at this point.

[The justification follows:]

Exhibit 1

DEPARTMENT OF COMMERCE
MINORITY BUSINESS DEVELOPMENT AGENCY
Budget Estimates, Fiscal Year 1994
Congressional Submission

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7	Summary of Financing	MBDA- 7
8	Adjustments to Base	MBDA- 8
9	Justification of Adjustments to Base	MBDA- 9
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	Resource Development	
	Public Sector	MBDA-21
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	Advocacy, Research & Information	
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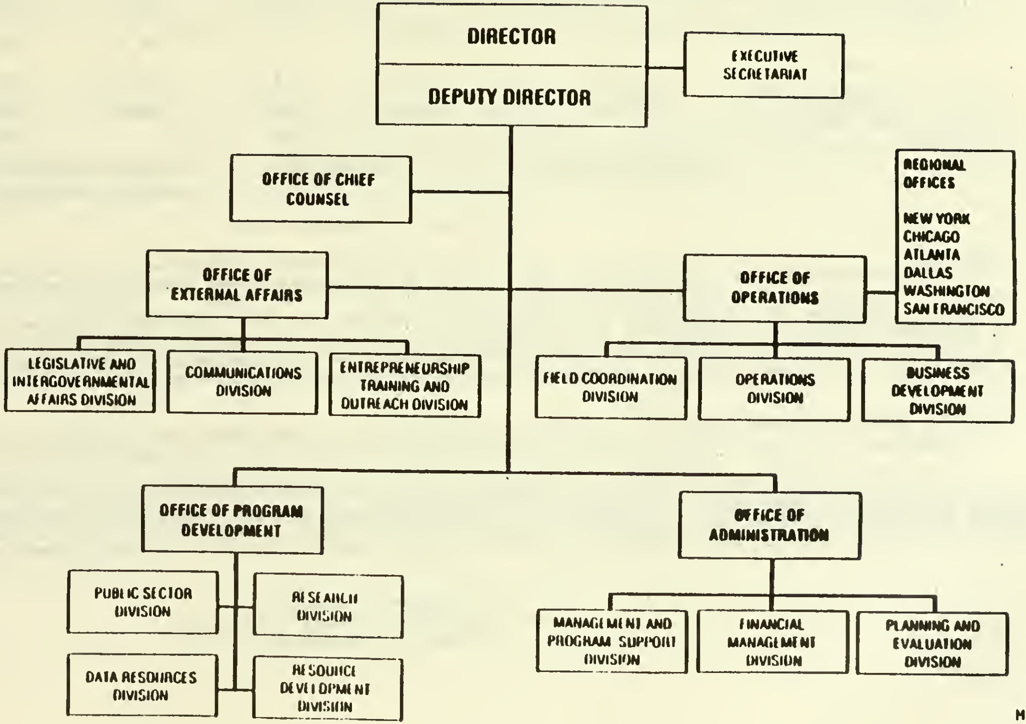
Exhibit 2

U.S. Department of Commerce
MINORITY BUSINESS DEVELOPMENT AGENCY


DIRECTOR
DEPUTY DIRECTOR
EXECUTIVE SECRETARIAT
OFFICE OF CHIEF COUNSEL
OFFICE OF EXTERNAL AFFAIRS
LEGISLATIVE AND INTERGOVERNMENTAL AFFAIRS DIVISION
COMMUNICATIONS DIVISION
ENTREPRENEURSHIP TRAINING AND OUTREACH DIVISION
OFFICE OF OPERATIONS
REGIONAL OFFICES
NEW YORK
CHICAGO
ATLANTA
DALLAS
WASHINGTON
SAN FRANCISCO
FIELD COORDINATION DIVISION
OPERATIONS DIVISION
BUSINESS DEVELOPMENT DIVISION
OFFICE OF PROGRAM DEVELOPMENT
PUBLIC SECTOR DIVISION
RESEARCH DIVISION
DATA RESOURCES DIVISION
RESOURCE DEVELOPMENT DIVISION
OFFICE OF ADMINISTRATION
MANAGEMENT AND PROGRAM SUPPORT DIVISION
FINANCIAL MANAGEMENT DIVISION
PLANNING AND EVALUATION DIVISION

MBDA-1

Exhibit 3

Department of Commerce
Minority Business Development Agency
General Statement

The Minority Business Development Agency is the only Federal Agency designed to redress the disparity between Minority Business ownership and majority business ownership. Minorities account for about 25% of the nation's population yet own only 6% of the nation's businesses and produce only 1% of its gross receipts. The Minority Business Development Agency (MBDA) is charged with fostering the development of economic opportunities for minority entrepreneurs.

Minority-owned businesses face major obstacles, especially inadequate capital resources and limited market access. These and other institutional barriers have perpetuated the underrepresentation of minority-owned businesses in the competitive marketplace.

This Administration is committed to increasing public and private sector investment in areas critical to the nation's long term economic growth. MBDA will help carry out this goal by promoting public and private investment in the development of competitive minority-owned businesses. Through its programs, MBDA will help eliminate the barriers to minority business formation and expansion and bring more minority businesses into the economic mainstream.

The following is a comparison of the FY 1993 enacted amount with the FY 1994 estimates and related data on current employment for this program within the Department of Commerce.

(Dollar Amounts in Thousands)

	1993 Appropriation Currently Available		1994 Estimate		Increase/ (Decrease)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 2/28/93
Enterprise Dev........	148	$32,486	148	$39,618	0	$7,132	123
Resource Development..	27	2,898	27	3,164	0	266	23
Advocacy, Research and Information........	34	2,505	34	2,599	0	94	28
Total Requirements....	209	$37,889	209	$45,381	0	$7,492	174

Enterprise Development

The Enterprise Development activities contained in this budget include Minority Business Development Centers (MBDCs), Indian Business Development Centers (IBDCs), and Minority Enterprise Growth Assistance (MEGA) Centers. The MBDCs & IBDCs will provide quality services as determined by the local supply and demand needs of the communities in which they are located. MEGA Centers will provide additional and enhanced services which the local centers may not be able to provide.

In FY 1992, the Agency's service delivery network assisted 16,445 minority clients. Business activities of $ 1.37 billion were produced in terms of procurement contracts and financing assistance provided. This produced an economic value (return on investment) of 64.72 to 1: $64.72 received by minority businesses through contracts and financing for every taxpayer dollar appropriated to the program. During the same fiscal year, the centers helped 1,362 new business startups which created 4,083 jobs nationwide. Established firms assisted by MBDA employed 112,227 people. The agency plans to establish three or four MEGA Centers with the requested $5 million increase in FY 1994.

Resource Development

The Resource Development activity is responsible for developing new and innovative programs in the public and private sectors. The resource development activities have focused on entrepreneurship, franchising, international trade, travel and tourism and emerging growth industries. Among the initiatives planned for this fiscal year are: (1) capital access through identification of alternative financing sources; (2) accelerated marketing to encourage increased public and private purchases of goods and services from minority firms. Resource Development activities also include working directly with the Offices of Small and Disadvantaged Business Utilization (OSDBU) of the Federal government, Minority Business Opportunity Committees (MBOCs) at the local level and the private sector in general through national trade associations.

Advocacy, Research and Information

MBDA is the advocate for expanding the growth and development of minority business enterprise. MBDA's advocacy activities include the Minority Enterprise Development (MED) Week observance, local and regional business conferences and a variety of publications, including our own Minority Business Today, which highlights the accomplishments of MBEs. Additionally, MBDA disseminates written, video and verbal information at major national exhibits and conferences as well as at local and regional events.

MBDA's Research Program is designed to identify market-based needs of minority-owned businesses and to provide recommendations for policy and program directions. This will be accomplished through four program strategies: (1) analysis of minority business status, performance, constraints and trends; (2) identification of public and private resources necessary for business development including financial, human, social and physical capital; (3) identification of areas with growth potential in Federal, state and local government, consumer, private sector and international markets; and (4) assessment of programs to determine if they are meeting the current needs of the minority business community. In FY 1994 the Research Program will conduct studies to identify market supply and demand conditions in MBDC service areas. No program can stay productive and competitive without on-going research and pertinent data collection.

The Information subactivity will continue to provide information management and increase the agency use of modern information technology. This will improve internal management productivity, efficiency, and effectiveness. MBDA will continue to collect on-line performance data on currently funded programs through the MBDA computerized network. MBDA will continue to operate the Automated Business Enterprise Locator System (ABELS), a nationwide data base of minority-owned firms. In FY 1994, MBDA plans to continue efforts initiated in FY 1993 to increase the number of minority-owned firms registered in ABELS that are capable of selling their goods and services to the private sector, state or local governments, and Federal agencies. MBDA will continue to provide computer printouts and mailing labels to appropriate purchasing officials to assist them in purchasing from minority-owned firms. MBDA will also begin to use electronic methods for disseminating this information.

Summary

This FY 1994 budget represents MBDA's framework for economic growth and job creation through increased coordination with other Commerce bureaus. Through implementation of the improvements and activities outlined in this budget request, MBDA will be a cornerstone in the Commerce Department's efforts to revitalize and coordinate the federal government's activities in business and economic development. MBDA spurs business and economic development by: enhancing minority business participation in high growth industries such as technology and telecommunications, encourage minority business participation in the export of U. S. goods, and building and expanding an infrastructure for minority participation in U. S. tourism.

Exhibit 5

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page. No.		Positions	Budget Authority	FTE
	Amount available for FY 1993 as shown in 1994 President's Budget	209	38,268	188
	less: December 17, 1992 Proposed transfers not implemented (allowed by P.L. 102-395)	0	(379)	0
	Appropriation available, 1993	209	37,889	188
MBDA- 8	plus: 1994 adjustments to base	0	2,492	2
	1994 base	209	40,381	190
	plus: 1994 program changes	0	5,000	0
	1994 estimate	209	45,381	190

Page. No.	Comparison by activity:		1992 Actual Personnel	1992 Actual Amount	1993 Currently Available Personnel	1993 Currently Available Amount	1994 Base Personnel	1994 Base Amount	1994 Estimate Personnel	1994 Estimate Amount	Increase/ (Decrease) over 1994 Base Personnel	Increase/ (Decrease) over 1994 Base Amount
MBDA-13	Enterprise Development:											
	Business Development	Pos./BA	155	36,855	148	32,486	148	34,618	148	39,618	0	5,000
		FTE/Obl.	132	39,620	130	36,685	132	34,618	132	39,618	0	5,000
	Subtotal, Enterprise Dev.	Pos./BA	155	36,855	148	32,486	148	34,618	148	39,618	0	5,000
		FTE/Obl.	132	39,620	130	36,685	132	34,618	132	39,618	0	5,000
MBDA-21	Resource Development:											
	Public Sector	Pos./BA	13	1,265	13	1,211	13	1,291	13	1,291	0	0
		FTE/Obl.	12	1,330	12	1,528	12	1,291	12	1,291	0	0
	Private Sector	Pos./BA	14	1,762	14	1,687	14	1,873	14	1,873	0	0
		FTE/Obl.	13	2,759	13	2,283	13	1,873	13	1,873	0	0
	Subtotal, Resource Dev.	Pos./BA	27	3,027	27	2,898	27	3,164	27	3,164	0	0
		FTE/Obl.	25	4,089	25	3,811	25	3,164	25	3,164	0	0

Page. No.	Comparison by activity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
MBDA-29	Advocacy, Research & Info:											
	Advocacy.................	Pos./BA	7	515	7	492	7	444	7	444	0	0
		FTE/Obl.	7	891	7	492	7	444	7	444	0	0
	Research.................	Pos./BA	8	1,097	8	1,051	8	1,104	8	1,104	0	0
		FTE/Obl.	8	1,405	8	1,351	8	1,104	8	1,104	0	0
	Information..............	Pos./BA	19	1,006	19	962	19	1,051	19	1,051	0	0
		FTE/Obl.	18	878	18	1,217	18	1,051	18	1,051	0	0
	Subtotal, Advocacy, Research & Information............	Pos./BA	34	2,618	34	2,505	34	2,599	34	2,599	0	0
		FTE/Obl.	33	3,174	33	3,060	33	2,599	33	2,599	0	0
	Direct Obligations..........	Pos./BA	216	42,500	209	37,889	209	40,381	209	45,381	0	5,000
		FTE/Obl.	190	46,883	188	43,556	190	40,381	190	45,381	0	5,000
	Adjustments to Obligations:											
	Recoveries...............			(2,403)		0		0		0		0
	Unobligated Balance, SOY..			(7,706)		(5,667)		0		0		0
	Unobligated Balance, Tran.			0		0		0		0		0
	Unobligated Balance, EOY..			5,667		0		0		0		0
	Unobligated Balance, Exp..			59		0		0		0		0
	Financing from Transfers:											
	Transfer from Other Accts.			0		0		0		0		0
	Transfer to Other Accts...			0		0		0		0		0
	Appropriation..............			42,500		37,889		40,381		45,381		5,000

Exhibit 7

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations.................	$47,033	$44,156	$40,997	$45,997	$5,000
Financing:					
Offsetting collections from:					
Federal funds....................	(150)	(600)	(616)	(616)	0
Trust funds......................	0	0	0	0	0
Non-Federal sources..............	0	0	0	0	0
Recoveries.......................	(2,403)	0	0	0	0
Unobligated balance, start of year	(7,706)	(5,667)	0	0	0
Unobligated balance transferred...	0	0	0	0	0
Unobligated balance, end of year..	5,667	0	0	0	0
Unobligated balance lapsing.......	59	0	0	0	0
Budget Authority.................	42,500	37,889	40,381	45,381	5,000
Transfer from other accounts......	0	0	0	0	0
Transfer to other accounts........	0	0	0	0	0
Appropriation....................	42,500	37,889	40,381	45,381	5,000

Exhibit 8

Department of Commerce
Minority Business Development Agency
Minority Business Development
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Personnel Compensation and Benefits:			
1993 Pay raise	0	0	$105
Within-grade step increases	0	0	72
Civil Service Retirement System (CSRS)	0	0	(25)
Federal Employees Retirement System (FERS)	0	0	45
Thrift Savings Plan	0	0	7
Federal Insurance Contribution Act (FICA) - OASDI	0	0	21
Health Insurance	0	0	44
Employees Compensation Fund	0	0	59
Travel:			
Per diem	0	0	6
Rental payments to GSA	0	0	122
Communications, utilities, & miscelleous charges:			
Other communications system	0	0	11
Printing and reproduction	0	0	5
Other services:			
Working Capital Fund	0	0	18
Supplies and materials	0	0	2
FY 1993 Supplemental	0	2	2,000
Total, Adjustments to Base	0	2	2,492

Exhibit 9

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

		Positions	FTE	Amount
ESTIMATED COST CHANGES:				
1993 Pay Raise		0	0	$105
Full-year cost of 1993 pay increase and related costs:				
A pay raise of 3.7% was effective January 1, 1993.	Amount			
Total cost in 1994 of 1993 pay increase	375,000			
Less amount funded in 1993	(281,000)			
Less amount absorbed	0			
Amount requested in 1994 to provide full-year cost of 1993 pay increase	94,000			
Total cost of payment to Working Capital Fund	46,000			
Less amount funded in 1993	(35,000)			
Amount requested to provide full-year cost of payment to Working Capital Fund	11,000			
Total, adjustment for 1993 pay increase	105,000			
Within-Grade Step Increases		0	0	72

An increase of $71,524 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.

Estimated number of within-grade step increases	80
Step increases not earned due to turnover (13.8% x 80)	11
Average step above step 1 per separation	3
Average cost per within-in grade step increase	$1,343
Gross cost of scheduled step increases ($1,343 x 80)	$107,440
Less: Savings due to separations ($1,343 x 11 x 3)	(44,319)
Subtotal, personnel compensation	63,121
Benefits @12.3%	8,403
Total adjustment to base	$71,524

Exhibit 9

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Civil Service Retirement System (CSRS)	0	0	(25)

The number of employees covered by Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employee's Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 71.2% in 1993 to 66.6% in 1994. Contribution rates will remain the same.

1994 $7,654,000 x .666 x .07	$356,829
1993 $7,654,000 x .712 x .07	381,475
Total adjustment-to-base	($24,646)

	Positions	FTE	Amount
Federal Employees Retirement System (FERS)	0	0	45

The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 28.8% in 1993 to 33.4% in 1994. The contribution rates will remain the same at 12.9% in 1994 for regular employees.

1994 $7,654,000 x .334 x .129	$329,780
1993 $7,654,000 x .288 x .129	284,361
Total adjustment-to-base	$45,419

	Positions	FTE	Amount
Thrift Savings Plan (TSP)	0	0	7

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2%.

1994 $7,654,000 x .334 x .02	$51,129
1993 $7,654,000 x .288 x .02	44,087
Total adjustment-to-base	$7,042

Exhibit 9

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Federal Insurance Contributions Act (FICA)	0	0	21
As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in FY 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2% in 1994.			
1994 $7,654,000 x .334 x .929 x .062 ... $147,246			
1993 $7,654,000 x .288 x .922 x .062 ... 126,010			
Total adjustment-to-base ... $21,236			
Health Insurance	0	0	44
Effective January 1992, MBDA's contribution to Federal employees' health insurance premiums increased by 8.32%. Applied against the 1993 estimate of $524,000, the additional amount required is $43,597.			
Employees' Compensation Fund	0	0	59
The Employees' Compensation Fund bill for the year ending June 30, 1992, is $58,650 higher than the bill for the year ending June 30, 1991. The charges will reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.			
Per Diem	0	0	6
Effective January 1992, the General Services Administration raised per diem rates. This increase results in a 5.0% increase to MBDA. This percentage was applied to the 1993 estimate of $123,000 to arrive at an increase of $6,150.			
Rental Payments to GSA	0	0	122
GSA rates are projected to increase 7.35% in 1994. This percentage was applied to the 1993 estimate of $1,661,000 to arrive at an increase of $122,084.			
Communications, Utilities, & Miscellaneous Charges - Other Communications System	0	0	11
The Washington Interagency telecommunication System (WITS) telephone conversion will be installed in the Department, converting the Centex switch to GSA/WITS switch. The estimated increase in operating cost is $11,000 due to GSA imposed line charges in the Hoover Building.			

Exhibit 9

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
GPO Printing	0	0	5
The Government Printing Office (GPO) has provided an estimated rate increase of 3.7%. This percentage was applied to the 1993 estimate of $136,000 to arrive at an increase of $5,032.			
Working Capital Fund	0	0	18
The request of $18,000 will fund inflationary cost increases in the Departmental Working Capital Fund to maintain the current level of operations. These include items such as within-grade increases, rent payments to GSA, printing costs, and other adjustments which are beyond the control of the Department.			
Supplies and Materials	0	0	2
Based on the GNP deflator of 3.1%, the cost of supplies and materials is expected to increase by $2,232 from the 1993 estimate of $72,000.			
FY 1993 Supplemental	0	2	2,000
This request supports program operations at the 190 FTE level authorized by Congress in the FY 1993 appropriation. The amount partially restores the current level of operations of the MBDC program and other programs, and funds salaries, benefits, travel, rent payments to GSA, printing costs, and other costs which support the Minority Business Development program.			
Total FY 1994 Adjustments to Base and Built-in-Changes	0	2	$2,492

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Enterprise Development:											
Business Dev.....	Pos./BA	155	36,855	148	32,486	148	34,618	148	39,618	0	5,000
	FTE/Obl.	132	39,620	130	36,685	132	34,618	132	39,618	0	5,000
Total	Pos./BA	155	36,855	148	32,486	148	34,618	148	39,618	0	5,000
	FTE/Obl.	132	39,620	130	36,685	132	34,618	132	39,618	0	5,000

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE (By Subactivity)

Activity: Enterprise Development
Subactivity: Business Development

Goals and Objectives (For FY 1994)

Goal:

To promote private and public sector investment in one of the most critical areas of the nation's economy through the effective development and utilization of competitive minority businesses.

Objectives:

- To increase productivity and create more jobs.
- To provide hands-on professional business assistance to minority entrepreneurs through the MBDA client service delivery network, (i.e., the Minority Business Development Center Program, the Indian Business Development Center, and the Minority Enterprise Growth Assistance Center Initiative).
- To facilitate access to markets, capital, and business information.
- To participate in Community Development Bank and Enterprise Zone initiatives at the Federal, state, and local levels.

Base Program (FY 1994)

MBDA directly contributes to the employment of the country's minority citizens by providing needed business development and assistance services through a national service delivery network. This network, currently made up of three minority business development concepts, is tailored to address the needs of minority businesses and prospective entrepreneurs. The network reaches over 100 of the most populated metropolitan areas providing the public with: (1) the basic management and technical assistance and marketing services of the Minority Business Development Center (MBDC) Program, (2) the uniquely targeted business development services of the Indian Business Development Centers (IBDC), and (3) more recently, the more advanced and expanded services of the Minority Enterprise Growth Assistance (MEGA) Center Initiative.

Hands-on professional business assistance is provided to minority entrepreneurs through MBDA's nation-wide network. Skilled professionals operate the MBDC Program, MEGA Center Initiative, and IBDC Program to ensure the creation and expansion of viable minority firms.

The Agency's Enterprise Development activities for FY 1994 reflect an improved, more market-focused (MBDC) Program, a more complex (IBDC) program, and an expanded (MEGA) Center Initiative. The network will provide services as determined by the local supply and demand needs of the communities where they are located. MEGA Centers will provide additional services which the local centers may not be able to provide. Funding for all network programs is based upon market needs, and is economically indexed. Additionally, incentives are built into the design of each program element to stimulate center performance. Each program has its own set of performance indicators used to evaluate and rate the Agency's effort in a particular location. Client satisfaction, however, is the key indicator for all programs of the client service delivery network.

Minority Business Development Center (MBDC) Program

The Minority Business Development Center Program is the core program of the client service delivery network. It provides two essential types of business development services to the minority community. First, the program promotes and markets minority business to local resources such as sources of investment, financing, and procurement. The goal is to demonstrate to the local business community that using minority vendors makes good business sense. For example, using minority firms is an effective way of doing business for the following reasons:

- Using minority vendors increases access to minority consumer markets and stimulates economic growth within a company's service territory.
- Because most minority vendors are small vendors, they can offer quality products and services at lower prices, as well as quick turnaround and response times.

Using minority vendors is good for the local business community. As minority-owned enterprises expand, they create new jobs and introduce innovative products and services.

Second, the MBDC Program is the only government program that provides hands-on, high-quality business assistance services specifically for minority clients, and is comparable to expensive private sector providers. Such comprehensive technical assistance as bid preparation, financial packaging, business plan development, and other similar types of services are not offered specifically to the minority community in an affordable fashion. Thus, entrepreneurs who would not normally have a chance to enter into and compete in the competitive marketplace because of the prohibitive cost of doing so, now have the opportunity to directly contribute to the economic health of the nation.

In FY 1993, MBDA is funding a Minority Enterprise Growth Assistance Center (MEGA) as a pilot in Chicago. The goal of the pilot program is to address the more advanced business needs of minority entrepreneurs.

Indian Business Development Centers (IBDC)

The Indian Business Development Centers will continue to address the on-going economic problems of Indian Businesses and increase their access to more complex services and business opportunities through the MEGA Center Initiative. In order to leverage existing resources, MBDA will integrate the efforts of its centers with programs run by tribal nations, reservations, public agencies, such as the Administration for Native Americans and the Bureau of Indian Affairs, and private organizations.

MBDA Delivery System Information Support

Minority-owned firms and potential entrepreneurs need economic and marketing information about their industry and the geographic areas in which they operate. Additionally, they need to receive timely information about procurement opportunities. Access to this kind of information is normally restricted to large firms that can afford to pay up-front expenses and annual subscription fees. For this reason, minority-owned firms ordinarily lack access to valuable information.

To narrow this information gap, (MBDA) provides information support systems including hightech service and on-line in a menu format. The on-line menu approach ensures the flexibility to receive only the information needed. The access to computer data bases provided by these systems is essential to fully assist customers in obtaining financing and contracts. Each center is able to access these computer data bases through microcomputers using telecommunications capabilities provided by the information service contractors and the Department of Commerce.

Performance Measures	FY 1992	FY 1993	FY 1994
1. MBDC and IBDC Programs			
- Number of Customers	16,765	17,000	17,100
- Hours of M&TA	275,600	280,000	235,000
- $Financial/$Procurement	1,398,000,000	1,430,000,000	1,435,000,000
- Business Starts	1,100	1,100	940
- Jobs Within Starts	3,600	3,600	3,070
2. MEGA Centers			
- Number of Customers	-	747	-
- Hours of M&TA	-	24,000	-
- $Financial/$Procurement	-	34,000,000	-
- Business Starts	-	100	-
- Jobs Within Starts	-	300	-

Exhibit 13

Department of Commerce
Minority Business Development Agency
Minority Business Development
INCREASE FOR 1994
(Dollars amounts in thousands)

	1994 Base		1994 Estimate		Increase/ (Decrease)	
	Personnel	Amount	Personnel	Amount	Personnel	Amount
Business Development.....Pos/BA	148	$34,618	148	$39,618	0	5,000
FTE/Obl.	132	34,618	132	39,618	0	5,000

Funding to the MEGA Centers (0 FTE, + $5,000)

MBDA's MEGA Centers represent a significant step forward, raising the value of our delivery network to the minority-owned businesses and potential entrepreneurs. The Agency will establish up to four MEGA Centers during FY 1994. The MEGA Centers, will provide significantly enhanced management and technical assistance in high-growth areas such as franchising, international trade, capital development, and specialized construction assistance with greater emphasis on surety bonding in the Metropolitan Statistical Areas (MSA) in which they are located. They will also provide specialized support to the entire network of MBDCs and IBDCs.

The MEGA Centers will seek to integrate MBDA's services with those of supporting private and public sector entities, including Federal agencies, such as EDA, ITA, SBA and HUD, and will promote minority participation in Community Development Banks, Enterprise Zones, industrial parks, and various other programs focused on overall business and economic development.

Performance Measures:	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
- Numbers of Customers	1,400	1,470	1,540	1,620	1,700
- Hours of M&TA	70,000	73,500	77,200	81,000	85,000
- $Financial/$Procurement	95,000,000	100,000,000	105,000,000	110,000,000	115,000,000
- Business Starts	260	270	285	300	315
- Jobs Within Starts	880	920	970	1,020	1,070
Costs:					
Direct Obligations					
Capitalized	0	0	0	0	0
Uncapitalized	5,000	5,000	5,000	5,000	5,000
Total	5,000	5,000	5,000	5,000	5,000
Budget Authority	5,000	5,000	5,000	5,000	5,000
Outlays	2,540	4,715	5,000	5,000	5,000
Permanent Positions	0	0	0	0	0
FTE	0	0	0	0	0

Exhibit 15

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Enterprise Development
Subactivity: Business Development
Program Change: MBDA Regional Business Service Center Program

Object Class		1994 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	5,000
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	5,000

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resource development:											
Public Sector......	Pos./BA	13	1,265	13	1,211	13	1,291	13	1,291	0	0
	FTE/Obl.	12	1,330	12	1,528	12	1,291	12	1,291	0	0
Total	Pos./BA	13	1,265	13	1,211	13	1,291	13	1,291	0	0
	FTE/Obl.	12	1,330	12	1,528	12	1,291	12	1,291	0	0

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE (By Subactivity)

Activity: Resource Development
Subactivity: Public Sector

Goals and Objectives (for FY 1994)

Goal:

To ensure full implementation of MBDA's responsibilities under Section One(1) of Executive Order 12432 and Section One (1) of Executive Order 11625 at the Federal, state and local levels.

Objectives:

- To expand MBDA's participation in the Minority Business Opportunity Committee (MBOC) program.
- To secure support of resources from other Federal, and state and local governments to implement MBDA initiatives.
- To provide guidance to Federal agencies in setting their annual minority business goals, and monitor performance.
- To improve the relationship with the Directors of the Office of Small & Disadvantaged Business Utilization (OSDBU)
- To disseminate public and private sector business opportunities information to MBDCs.

Base Program (FY 1994)

Programs/Initiatives

The Public Sector programs promote the mobilization of state and local government resources for the development and growth of minority business enterprises. These efforts have strengthened cooperation among state and municipal governments, minority business enterprises, and our six regional offices.

At the Federal level, MBDA plays a key role in promoting, reviewing and evaluating Federal agencies' annual procurement and financial assistance goals for minority-owned firms. In 1991, total federal funding for MBEs exceeded $17.1 billion, an increase of $3.2 billion (23%) over the previous year's total of $13.9 billion. MBE grants, loans, and guarantees increased from $4.48 billion in FY 90 to $7.07 billion in FY 91, an increase of $2.59 billion (58%).

At the state and local level, MBDA's long-term strategy is to increase resources for the development of minority business, and to encourage state and local governments to invest more of their resources in minority business development. In FY 1992, MBDA initiated a series of regional conferences to leverage these resources. These conferences were designed to organize information about state and local public sector programs and opportunities available to minority firms. In addition to identifying key aspects of the various minority business development programs the conferences helped to raise awareness of the diversity of the minority business owners capability within each region. In FY 1993 and beyond, MBDA will increase collaboration among Federal, state and local public sector funded infrastructure and other reinvestment projects to assure minority businesses have access to business development and job creation opportunities. Specific public sector efforts such as the Federal-aid highway program, mass transit capital improvements, and Community Development Block Grants, will be featured in the conference series.

The Public Sector maintains on-going Minority Business Opportunity Committee (MBOC) programs which are designed to coordinate and leverage resources of Federal, state and local governments and the private sector MBOCs are housed within Federal Executive Boards (FEB) and are located in four of the ten federal regions. The FEB is an organization within the Federal Government which is comprised of representatives of all federal agencies. Under the leadership of the FEB, procurement opportunities are identified by the various agencies represented. Consequently, these MBOCs are strategically positioned to support and implement activities that bring together local heads of Federal Government agencies, state and local governments and private sector entities. To assist in coordinating resources in the Los Angeles community after the 1992 Civil Disorder, MBDA established the Los Angeles MBOC in cooperation with the Los Angeles FEB. In 1992, MBOCs identified procurement opportunities totalling $62 million: Chicago ($56 million), Pittsburgh ($5 million), and Houston ($1 million).

	FY 1992	FY 1993	FY 1994
Performance Measures:			
No. of MBOC	3	4	4
No. of Federal Agency Plans Review	26	26	26
No. of MOUs & Interagency Agreements	10	10	10
No. of Seminars	6	6	6

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resource Development:											
Private Sector.....	Pos./BA	14	1,762	14	1,687	14	1,873	14	1,873	0	0
	FTE/Obl.	13	2,759	13	2,283	13	1,873	13	1,873	0	0
Total	Pos./BA	14	1,762	14	1,687	14	1,873	14	1,873	0	0
	FTE/Obl.	13	2,759	13	2,283	13	1,873	13	1,873	0	0

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE (By Subactivity)
(Dollar Amounts in Thousands)

Activity: Resource Development
Subactivity: Private Sector

Goals and Objectives (For FY 1994)

Goal:

To increase minority representation in the economy by facilitating participation in high-growth, non-traditional business sectors.

Objectives:

To design and promote program initiatives which will complement and enhance the services of the MBDA delivery system.

Base Program (FY 1994)

The role of the Private Sector activity is to develop national program initiatives in targeted market areas such as Franchising, Tourism, International Trade and Capital Development for implementation by locally funded projects. The major emphases are to increase the number of MBEs and to create jobs.

Market Development

Franchising is a fast growing, highly successful business organization format and represents an significant opportunity for MBEs to start and expand businesses. Currently, approximately 30% of domestic retail sales ($750 billion) are accounted for by franchise sales. By the year 2000, it is projected that this figure will reach 50% of retail sales or $1 trillion. During Fiscal Years 1992 and 1993, MBDA's Franchise initiative reached over 3000 prospective minority franchisees with critical information on the risks, rewards and requirements of franchising. The impetus for this initiative was that many minority neighborhood businesses were being displaced by franchises which were not minority-owned. Minorities own less than 3% of all franchised businesses.

MBDA has been working with the International Trade Administration (ITA) to jointly sponsor international trade missions and provide follow-up workshops in selected locations throughout the country. The trade missions included one delegation to the Persian Gulf which resulted in 459 sales leads and $3.5 million in export sales and two delegations to Mexico which created over 200 sales leads, a $40 million contract, a joint venture and the opening of a foreign sales office in Mexico. MBDA will continue to train the Minority Business Development Centers in international trade related services. In conjunction with the SBA, Agency for International Development and the Export-Import Bank, the MBDA will promote minority firms and products through trade missions and other market opportunities. In addition, MBDA and the Economic Development Administration will participate in a joint funding effort to provide training for increasing the export of Native American Indian products.

Travel and tourism represents a $350 billion high-growth industry which offers tremendous business opportunities for minority firms. In 1990, international travel to the U.S. yielded nearly 40 million travelers and $52.8 billion in expenditures. Minority entrepreneurs can offer cultural and language commonalities with international tourists. In cooperation with the U.S. Travel and Tourism Agency (USTTA), MBDA will identify market opportunities, facilitate the entry of minority-owned firms into the market, and develop a tourism infrastructure based upon minority history, culture and recreational facilities. The products of this initiative will include the development of case studies to promote travel and tourism.

The rural business development initiative is designed to increase the number of minority entrepreneurs and firms operating in predominantly rural areas. In addition to facing problems similar to his urban counterpart, the rural minority entrepreneur faces isolation, limited business infrastructure and lack of economic resources. The agency's rural initiative focuses not only on the provision of business development services to minority-owned rural businesses but also on identifying and leveraging limited resources for those areas. These efforts will be provided through the establishment of a rural development component within targeted Business Development Centers.

Currently, MBEs represent a mere .5% of the total U.S. firms in the telecommunication industry. MBDA hopes to promote greater minority representation in this industry. The telecommunications project, initiated in FY 1992 and continuing into FY 1994, is a way to increase the competitiveness of minority-owned communications firms. In conjunction with the National Telecommunications and Information Agency, MBDA held a series of conferences and matched new minority telecommunications property owners with established multi-unit owners who serve as mentors and advisors to the new owners. This project, known as ComTrain, has been successful and is proposed for continuation. ComTrain has realized the development of two station owners who are now operating in the states of Ohio and Missouri. In addition, it has 14 new station owners being trained by corporate volunteer sponsors in the broadcast industry.

Capital Development

Access to capital continues to be a significant barrier to minority business development. Much of this lack of access comes from risk perceptions by the lending community. MBDA's capital development initiative focuses on increasing minority access to capital through information dissemination and cooperation with the Small Business Administration, the Securities and Exchange Commission, the Federal Reserve System and the Comptroller of the Currency. MBDA proposes to develop prototype criteria for regulatory classification of business loans which will be shared with agencies that have lending programs. This prototype will take into consideration location, collateral, quality and knowledge of the community and should ease the relatively high risk perception generally attributed to small and minority firms.

One of the primary inhibitors to the suppliers of capital is the absence of a standard, national secondary market. Such a secondary market could enhance the liquidity of minority/small business investment and encourage lending and investing. This increased lending activity would result in the development of new businesses and the creation of jobs. MBDA supports the development of a national secondary market. This activity will require the development of investment criteria and discounting or guaranty standards.

MBDA recently conducted an assessment of the surety bond industry requirements and practices. One of the recommendations to allay the negative perception of minority firms was the promotion and development of councils comprised of Bond Producers, Surety Companies, Guarantors and MBE advocates. Another recommendation was that MBDA provide training for its delivery system. MBDA conducted the training and is now developing Bonding Councils working through its delivery system.

Performance Measures:	FY 1992	FY 1993	FY 1994
Markets Development			
Franchise development seminars	56	24	24
No. of attendees	2800	1200	1200
Trade Missions	3	2	2
No. of MBES assisted	50	40	40
International Trade training seminars/conferences	4	6	6
No. of attendees	100	180	180
Telecommunications seminars	3	-	-
No. of attendees	50	-	-
No. of trainees	-	14	15
Capital Development			
MBDC training seminars	0	6	6
No. of attendees	0	200	200

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information:											
Advocacy............	Pos./BA	7	515	7	492	7	444	7	444	0	0
	FTE/Obl.	7	891	7	492	7	444	7	444	0	0
Total	Pos./BA	7	515	7	492	7	444	7	444	0	0
	FTE/Obl.	7	891	7	492	7	444	7	444	0	0

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE (By Subactivity)

Activity: Advocacy, Research and Information
Subactivity: Advocacy

Goals and Objectives (for FY 1994)

Goal:
To encourage and increase the participation of minority businesses in the economy by promoting the awareness of opportunities and rewards of and for minority business development.

Objectives:

- To enhance the visibility and public awareness of (MBDA) and its mission.
- To advocate public awareness of the diversity, competitiveness and quality of goods and services provided by minority businesses and the contributions they make to the nation's economy.
- To provids up-to-date information on or to Minority Business Enterprises (MBEs) helpful in their growth, and job creation.
- To promote the MBDC national network of centers which will provid quality technical and management assistance to minority firms.

Base Program (FY 1994)

MBDA's advocates the growth and the expansion of minority business, encourages minority entrepreneurs to participate in public and private business sectors and creates an awareness of domestic and global market opportunities. These efforts are coordinated and supported from MBDA's headquarters and its regional network of field offices and program support services.

The MBDA's advocacy program consists of some of the following activities:

- Publicize business successes and accomplishments of minority businesses to the general business community.
- Market and promote all MBDA programs and national initiatives through mass media, institutions of higher learning, Federal, state and local governments, civic, fraternal, and trade associations.
- Develop, design, publish and disseminate the Minority Business Today, Legislative Updates, as well as other minority business support publications.
- Develop, update and disseminate brochures, pamphlets, videos, public service announcements, press releases and other support informational products available to and from the new generation of MBDA Business Development Centers.

The Minority Enterprise Development Week (MED Week) celebration is a national observance of the economic and cultural achievements of minority entrepreneurs. More than 1,000 representatives from corporate America, government entities, minority business and trade associations meet in Washington, D.C. to share information, resources and procurement opportunities. A minority vendors procurement Trade Fair is held where representatives of corporations and government entities are available to provide guidance and counsel to minority business representatives on accessing procurement and other business growth opportunities.

An annual Executive proclamation has been issued for the past ten years to observe MED Week during the first week of October. MBDA regional offices and MBDA Business Development Centers throughout the country hold local celebrations which unite the efforts of local business leaders to strengthen local MBE entrepreneurial development. MED Week recognizes minority business leaders for their achievements. Traditionally the President or his representative presents achievement awards to outstanding minority entrepreneurs. Members of Congress and their staffs also participate in MED Week and annually host an MBE reception on Capitol Hill.

MBDA headquarters supplies most of the printed materials required by the six Regional Offices, four district offices and the entire MBDC system in support of the overall mission of the Agency. In FY 1994, to reduce cost and still meet the challenges of the Agency's public displays, exhibits, seminars, mailings and distributions, the MBDA will seek to reduce the handling and the shipping costs by consolidating the information now contained in 10 separate brochures or leaflets to fewer documents.

	FY 1992	FY 1993	FY 1994
Brochures	5	7	7
Public Service Advertisements (TV stations, newspapers, major market radio stations	20	20	30
Exhibits/Displays	21	10	24

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information:											
Research...........	Pos./BA	8	1,097	8	1,051	8	1,104	8	1,104	0	0
	FTE/Obl.	8	1,405	8	1,351	8	1,104	8	1,104	0	0
Total	Pos./BA	8	1,097	8	1,051	8	1,104	8	1,104	0	0
	FTE/Obl.	8	1,405	8	1,351	8	1,104	8	1,104	0	0

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE (By Subactivity)
(Dollar Amounts in Thousands)

Activity: Advocacy, Research and Information
Subactivity: Research

Goals and Objectives (for FY 1994)

Goal:

To foster minority business development by providing MBDA, its delivery system and other targeted customer groups with information about minority-owned business conditions, needs, development, resources and market opportunities.

Objectives:

To identify national and local minority business development needs in order to make informed and cost effective decisions about policy, program development and operations.

Base Program (FY 1994)

No program can stay productive and competitive without on-going research and pertinent data collection. MBDA's Research Program is designed to identify the needs and impact of minority-owned businesses and to recommend policy and program directions for the Agency. This will be accomplished through four program strategies:

(1) Analysis of minority business status, performance, impact, constraints, trends, and demographic, market and other factors affecting minority business development;
(2) Identification of public and private resources necessary for business development including financial, human, social and physical capital;
(3) Identification of areas with growth potential in Federal, state and local government, consumer, corporate America and international markets; and
(4) Assessment of current programs to determine if they are meeting national economic objectives, and if any changes or new programs are necessary.

MBDA research is used as the basis for making policy decisions and to: (1) improve operating programs and/or initiate new programs to meet changing market conditions; (2) inform the MBDA Business Development Centers of additional resource and market opportunities available for their customers; and (3) encourage Federal, state and local government agencies, private sector firms and community organizations to invest additional resources in minority business development.

Current Activities and Future Directions

Results from research projects completed in recent years have had a major impact on MBDA's products and services and their delivery to our customer groups. Adjustments to the MBDA Business Development Centers were made to improve the delivery of management and technical assistance. An assessment of MBDA's nationwide business information systems concluded that these systems are an integral part of the delivery system and that their funding should be increased. Findings from research projects on business development in rural areas and in the Native American community were used to design operating programs to meet needs in underserved communities. Analyses of economic and demographic data and the delivery system resulted in MBDA's move toward the MEGA Center concept and making the delivery system more market driven both at the national and local levels. For the first time, MBDA has started to identify the unique market needs of its delivery systems service areas. This is to be completed over a three year period. Market studies for up to thirty areas will be initiated in FY 1993, as reflected in the performance measures. Information will be gathered by contract to tailor Business Development Center programs according to local market conditions and needs.

The FY 1994 base level will enable the research program to continue earlier studies of industries and markets with high growth opportunity for minority firms such as various manufacturing and technology base industries. Information will be collected to improve the coordination and leveraging of other Federal, state and local and private sector minority business programs.

Performance Measures:	FY 1992	FY 1993	FY 1994
Number of research reports and policy studies initiated and/or completed	14	30	7
Average cost per research report	$79,000	$18,000	$76,000

Exhibit 10

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information:											
Information	Pos./BA	19	1,006	19	962	19	1,051	19	1,051	0	0
	FTE/Obl.	18	878	18	1,217	18	1,051	18	1,051	0	0
Total	Pos./BA	19	1,006	19	962	19	1,051	19	1,051	0	0
	FTE/Obl.	18	878	18	1,217	18	1,051	18	1,051	0	0

Exhibit 12

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Advocacy, Research and Information
Subactivity: Information

Goals and Objectives (for FY 1994)

Goal:

To promote the development of minority-owned businesses by providing timely information to the public and private sectors and to minority-owned firms.

Objectives:

- To provide the MBDA service delivery system with modern telecommunications and computer technology for use in collecting and reporting information.
- To move toward a national automated environment for minority business assistance through effective use of information technology.
- To disseminate information about minority-owned businesses to private sector and public sector purchasing officials.
- To improve internal management productivity, efficiency, and effectiveness.

Base Program (FY 1994)

MBDA has established an Information Program in compliance with the provisions of the Paperwork Reduction Act. This program provides direction, training, and technical assistance to the MBDA delivery system and the Agency in effectively using telecommunications, computer data bases, microcomputers, and other information technology. In addition, the program is responsible for improving the internal management, productivity, efficiency, and effectiveness of the Agency through automation and the reduction of paperwork. This will continue to result in more efficient and less costly processing and management of information.

The Information Program provides a nationwide telecommunications network that links together the delivery system with MBDA headquarters and the regional offices. It also provides for management of: (1) software and computer technology used by MBDA, and (2) the Business Information Support contracts and computer technology that are funded as part of the Enterprise Development Program and used by the delivery system. The Information Program also includes the continued development and operation of various MBDA computer systems including those which collect performance data from the MBDA delivery system, and the Automated Business Enterprise Locator System (ABELS) that is used to locate minority-owned firms for consideration as potential suppliers of goods and/or services to the private sector, Federal agencies, and others.

	FY 1992	FY 1993	FY 1994
Performance Measures:			
Number of minority-owned firms registered in the ABELS data base	17,000	17,000	18,000

Exhibit 16

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	$8,627	$8,627	$0
11.3	Other than full-time permanent	203	203	0
11.5	Other personnel compensation	120	120	0
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	8,950	8,950	0
12.1	Civilian personnel Benefits	1,984	1,984	0
13	Benefits for former personnel	0	0	0
21	Travel and transportation of persons	412	412	0
22	Transportation of things	32	32	0
23.1	Rental payments to GSA	1,757	1,757	0
23.2	Rental payments to others	26	26	0
23.3	Commun., util., misc. charges	353	353	0
24	Printing and reproduction	176	176	0
25	Other services	4,595	4,595	0
26	Supplies and materials	82	82	0
31	Equipment	30	30	0
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	21,984	26,984	5,000
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total Direct Obligations	40,381	45,381	5,000

Exhibit 16

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Personnel financed from direct obligations	1994 Base	1994 Estimate	Increase/ (Decrease)
Full-Time Equivalent Employment:			
Full-time permanent	183	183	0
Other than full-time permanent	7	7	0
Total	190	190	0
Authorized Positions:			
Full-time permanent	209	209	0
Other than full-time permanent	16	16	0
Total	225	225	0

Exhibit 17

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	$0	$0	$0
	Senior executive service	536	536	0
	General schedule	8,091	8,091	0
	Commisssioned officers	0	0	0
	Wage board/wage marine	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0
	Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
	Examiners of trademark appeals (P.L. 98-622)	0	0	0
	Senior foreign service	0	0	0
	Foreign service staff	0	0	0
	Foreign service nationals	0	0	0
	Consultants & experts	0	0	0
	Students	0	0	0
	Subtotal	8,627	8,627	0
11.3	Other than full-time permanent			
	General schedule	203	203	0
	Wage board	0	0	0
	Experts & consultants	0	0	0
	Hourly	0	0	0
	Subtotal	203	203	0
11.5	Other personnel compensation			
	Overtime	20	20	0
	SES performance awards	0	0	0
	Cash awards	60	60	0
	Merit pay awards	40	40	0
	Other	0	0	0
	Subtotal	120	120	0

Exhibit 17

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
11.8	Special personnel services payments			
	Foreign service officers (State)	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
11.9	Total personnel compensation	8,950	8,950	0
12.1	Civilian personnel benefits			
	Civil service retirement	412	412	0
	Federal employees' retirement	380	380	0
	Thrift savings plan	59	59	0
	Federal insurance contribution act	298	298	0
	Health insurance	620	620	0
	Life insurance	22	22	0
	Employees' compensation fund	193	193	0
	Other	0	0	0
	Subtotal	1,984	1,984	0
13	Benefits for former personnel			
	Severance pay	0	0	0
	Unemployment compensation	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
21	Travel and transportation of persons			
	Common carrier	205	205	0
	Mileage	17	17	0
	Per diem/actual	173	173	0
	Vehicular	17	17	0
	Other	0	0	0
	(Overseas estimates)	0	0	0
	Subtotal	412	412	0

Exhibit 17

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
22	Transportation of things	32	32	0
	[Overseas estimates]	0	0	0
23.1	Rental payments to GSA	1,757	1,757	0
23.2	Rental payments to others	26	26	0
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	0	0	0
	Rental of office copying equipment	0	0	0
	Other equipment rental	6	6	0
	Federal telecommunications system	156	156	0
	Other telecommunications services	116	116	0
	Postal Service by USPS	75	75	0
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	353	353	0
24	Printing and reproduction			
	Publications	97	97	0
	Public use forms	18	18	0
	Envelopes	3	3	0
	Other	58	58	0
	[Payments to GA, WCF]	(158)	(158)	0
	[Overseas estimates]	0	0	0
	Subtotal	176	176	0

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Exhibit 17

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
25	Other services			
	Training:			
	University	41	41	0
	Office of personnel management	15	15	0
	Other	44	44	0
	Maintenance of equipment	135	135	0
	GSA reimbursable services	11	11	0
	ADP services	115	115	0
	Telecommunications services	135	135	0
	Payments to GA, WCF	1,962	1,962	0
	Other non-government contracts	121	121	0
	Other	2,016	2,016	0
	(Overseas estimates)	0	0	0
	Subtotal	4,595	4,595	0
26	Supplies and materials			
	Office supplies	40	40	0
	ADP supplies	42	42	0
	Other	0	0	0
	(Overseas estimates)	0	0	0
	Subtotal	82	82	0
31	Equipment			
	Office machines and equipment	3	3	0
	ADP hardware	23	23	0
	ADP software	4	4	0
	Other	0	0	0
	(Overseas estimates)	0	0	0
	Subtotal	30	30	0

Exhibit 17

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1994 Base	1994 Estimate	Increase/ (Decrease)
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	21,984	26,984	5,000
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total Direct Obligations	40,381	45,381	5,000

Exhibit 18

Department of Commerce
Minority Business Development Agency
Minority Business Development
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 1 - 1993 Structure
(Dollar amounts in thousands)

Activity/Subactivity	1994 Direct Obligations	Proposed Changes
Enterprise Development	39,618	
Business Development..........	39,618	No change
Resource Development	3,164	
Public Sector.................	1,291	No change
Private Sector................	1,873	$91,000 from Advocacy Activity
Advocacy, Research & Info.	2,599	
Advocacy......................	444	Merge $91,000 for Entrepreneurial Development Program into the Private Sector Activity
Research......................	1,104	No change
Information...................	1,051	No change
Total Requirements	45,381	

Exhibit 19

Department of Commerce
Minority Business Development Agency
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 2 - 1994 Structure
(Dollar amounts in thousands)

	Amounts				
Activity/Subactivity	1990	1991	1992	1993	1994
Enterprise Development	$31,615	$35,555	$39,620	$36,685	$39,618
Business Development	31,615	35,555	39,620	36,685	39,618
Resource Development	2,766	2,480	4,089	3,811	3,164
Public Sector	1,302	1,266	1,330	1,528	1,291
Private Sector	1,464	1,214	2,759	2,283	1,873
Advocacy, Research & Information	4,076	2,093	3,174	3,060	2,599
Advocacy	641	692	891	492	444
Research	1,165	540	1,405	1,351	1,104
Information	2,270	861	878	1,217	1,051
Total Direct Obligations	38,457	40,128	46,883	43,556	45,381

Exhibit 33

DEPARTMENT OF COMMERCE
MINORITY BUSINESS DEVELOPMENT AGENCY

Minority Business Development
APPROPRIATION LANGUAGE AND CODE CITATIONS

1. For necessary expenses of the Department of Commerce in fostering, promoting, and developing minority business enterprise,

15 U.S.C. 1512

15 U.S.C. 1512 authorizes the Secretary of Commerce to foster, promote and develop business, foreign and domestic.

2. Including expenses of grants, contracts, and other agreements with public or private organizations,

No Specific Authority

This phrase has been in the appropriation since FY 1980 and specifies that program expenses are included in the total appropriation request.

3. $45,381,000 of which $29,000,000 shall remain available until expended:

No Specific Authority

31 U.S.C. 718 provides that: "No specific or indefinite appropriation....shall be construed to be permanent or available continuously without reference to a fiscal year....unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provisions".

4. Provided, that not to exceed $16,381,000 shall be available for program management for fiscal year 1994.

No Specific Authority

This phrase has been in the appropriation since FY 1973 and limits th amount of funds for program management.

Exhibit 35

Department of Commerce
Minority Business Development Agency
Minority Business Development

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	FY 1991 Actual	FY 1992 Actual	FY 1993 Estimate	FY 1994 Estimate
Periodicals.............................	27	86	68	88
Pamphlets...............................	20	9	7	9
Audiovisuals............................	0	0	0	0
Total........................	47	95	75	97

Executive Order 11625 authorizes the Minority Business Development Agency (MBDA) to provide "for the development, collection, summarization, and dissemination of information that will be helpful to persons and organizations throughout the nation in undertaking or promoting the establishment and successful operation of minority business enterprise." MBDA's Office of External Affairs is responsible for the creation of periodicals, publications, and audiovisuals to carry out the mandate set forth in Executive Order 11625.

Exhibit 36

Department of Commerce
Minority Business Development Agency
Minority Business Development

Average Grade and Salaries

	FY 1992 Actual	FY 1993 Estimate	FY 1994 Estimate
Average ES salary	$101,071	$103,497	$107,982
Average GS/GM grade	9.53	9.46	9.46
Average GS/GM salary	$40,021	$40,876	$42,697
Total compensable workyears:			
Full-time equivalent employment	190	188	190
Full-time equivalent of overtime and holiday hours	2	1	2

Mr. SKAGGS. Testifying today for MBDA is its Acting Director, Loretta Young. Welcome. We will insert a copy of your biography in the record as well, and invite you to proceed with your testimony.

[The biographical sketch of Ms. Young follows:]

BIOGRAPHY OF LORETTA M. YOUNG, ACTING DIRECTOR, MINORITY BUSINESS DEVELOPMENT AGENCY, U.S. DEPARTMENT OF COMMERCE

On January 22, 1993, Secretary of Commerce Ronald H. Brown appointed Loretta M. Young as Acting Director of the Minority Business Development Agency (MBDA). Ms. young is the first African-American female to serve in this capacity since the Agency's inception in 1969.

Prior to this position, Ms. Young held several positions at MBDA, including Acting Assistant Director, Office of Operations, Chief, Management Division, Chief, Office of Planning and Evaluation Division, and Acting Chief, Communications Division. Her federal employment spans over 30 years, 20 of which are with MBDA. In her present position, Ms. Young has direct responsibility for overseeing the Agency's programs and initiatives, including the nationwide program of advocacy outreach efforts to mobilize public- and private-sector resources to increase minority business participation in the economy; responsibility for planning, budget objectives and policies affecting the Agency's Headquarters and field operations; presenting testimony before Departmental representatives, OMB and Congress on the Agency's mission and budgetary requirements; and designing, developing and administering criteria, systems and specific measures to evaluate the progress of the minority business development effort, especially as it relates to the MBDA nationwide funded network of approximately 107 Minority and Indian Business Development Centers.

Before joining the federal workforce, Ms. Young was a business instructor with Atlantic Business College in Washington, D.C. She has also taught courses for Virginia State University, Petersburg, Virginia. Her professional affiliations include: the Virginia State Office of Minority Business Enterprise, American Society of Public Administration, the National Business League, the NAACP and St. Paul's National Alumni Association. She is the recipient of many awards, including the 1992 Commerce Award for Unusually Outstanding Performance.

A native of Emporia, Virginia, Ms. Young received a Bachelor of Science Degree in Business Education from St. Paul's College, Lawrenceville, Virginia and a Master of Business Administration Degree from the George Washington University, Washington, D.C.

Ms. Young resides in Washington, D.C. and is a member and trustee of Shiloh Baptist Church, Alexandria, Virginia.

OPENING STATEMENT

Ms. YOUNG. Thank you very much. Mr. Chairman and members of the subcommittee. I am pleased to appear before you today in support of the Minority Business Development Agency's 1994 request of $45,381,000.

Let me synopsize my statement and submit the full statement for the record.

Within the agency, there is a spirit of optimism encouraged by an awareness of positive change. We embrace the President's commitment to improve the economy, and we are eager to do our part to build the economic infrastructure and create jobs. As Secretary Brown has stated, MBDA's programs are uniquely structured to ensure that new businesses are able to make long term contributions to our Nation's economy.

I want to talk to you today about how MBDA's programs support the President's goals in the areas of trade, job creation, and technology.

In 1992, the Minority Business Development Centers and American Indian Program assisted nearly 17,000 minority clients in obtaining $1.4 billion in procurement contracts and approved financing, producing a return on investment of $64 to $1. From these efforts, 1,362 new businesses were started, creating over 4,000 jobs. Overall, the 11,500 established firms that were assisted by MBDC employed over 112,000 people.

In 1993, we are pilot testing a new concept: The MEGA center in Chicago. This center employs experienced professionals who provide a more comprehensive array of technical services than do our traditional centers. In addition, the center will use advanced electronic information in assisting clients. The MEGA center serves all 10 Midwestern States within the Chicago region, enhancing the level of assistance available in the traditional centers.

Our Public Sector Program continues to encourage the development and growth of minority-owned businesses. At the Federal level, we evaluate Federal agencies' commitment to minority-owned business and develop interagency agreements with Federal agencies which has further promoted minority business opportunities.

To encourage State and local Government investment, we are conducting a series of regional conferences where State and local decision-makers discuss long-term strategies for minority businesses. We are funding Minority Business Opportunity Committees in Chicago, Pittsburgh, Houston and Los Angeles. These MBOCs continue to identify Federal procurement opportunities for minorities.

The Private Sector Program activity continues to promote MBDA's franchise and international trade initiatives. Last year, MBDA, in conjunction with ITA, led a trade mission to the Persian Gulf and one to Mexico. We are continuing the franchise seminar exposing potential franchisees to information about the requirements, risks and rewards of this $750 billion industry, and we expect to reach over 3,000 potential franchisees.

In the area of technology, MBDA is working to improve the number and expertise of minorities in the telecommunication industry. No program we find can stay productive and competitive without pertinent, ongoing research data collection and information dissemination. MBDA's advocacy and research and information activity provides that support.

Last year our Minority Enterprise Development Week observance attracted over 1,000 participants and the congressional reception proved to have been a successful networking event.

Research activities will continue to identify needs and impacts of minority-owned businesses and recommend policy and program direction to enhance Minority Business Development.

Our Information activities gather and disseminate information about minority businesses to those wishing to do business with minority enterprise and to those seeking business opportunities.

In conclusion, we are part—we are glad to be a part of the President's economic agenda. Our proposal represents an investment in our country's long-term economic security, making contributions in the area of job creation, trade and technology. We are seeking $45,381,000 for fiscal year 1994, an increase of $5 million over base to fund up to three additional MEGA centers.

We appreciate the support that the committee has given for our 1993 supplemental.

Mr. Chairman, this ends my statement and I will be glad to entertain any questions.

[The prepared statement of Ms. Young follows:]

U. S. DEPARTMENT OF COMMERCE

MINORITY BUSINESS DEVELOPMENT AGENCY

STATEMENT BY THE ACTING DIRECTOR

LORETTA M. YOUNG

BEFORE THE SUBCOMMITTEE ON

COMMERCE, JUSTICE, STATE, THE JUDICIARY AND

RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

APRIL 20, 1993

MR. CHAIRMAN, AND MEMBERS OF THE SUBCOMMITTEE. I AM PLEASED TO APPEAR BEFORE YOU TODAY IN SUPPORT OF THE MINORITY BUSINESS DEVELOPMENT AGENCY'S (MBDA) 1994 BUDGET REQUEST OF $45,381,000. WITHIN THE AGENCY THERE IS A SPIRIT OF OPTIMISM ENCOURAGED BY AN AWARENESS OF POSITIVE CHANGE. FOR OVER A DECADE THE AGENCY'S PROGRAMS HAVE SUFFERED NEGLECT. NEVERTHELESS, DURING THIS PERIOD, MBDA ASSISTED IN POSITIVE ACCOMPLISHMENTS ON BEHALF OF THE NATION'S MINORITY BUSINESS COMMUNITY. MBDA IS ENCOURAGED BY THE PROMISE OF A NEW DAY. WE EMBRACE THE PRESIDENT'S COMMITMENT TO IMPROVE THE ECONOMY AND WE ARE EAGER TO DO OUR PART TO HELP BUILD THE ECONOMIC INFRASTRUCTURE AND CREATE JOBS. AS SECRETARY BROWN HAS STATED, MBDA's PROGRAMS ARE UNIQUELY STRUCTURED TO ENSURE THAT NEW BUSINESSES ARE ABLE TO MAKE LONG TERM CONTRIBUTIONS TO OUR NATION'S ECONOMY.

I WANT TO TALK TODAY ABOUT HOW MBDA'S PROGRAMS SUPPORT THE PRESIDENT'S GOALS IN THE AREAS OF:

- JOB CREATION
- TRADE
- TECHNOLOGY

TO BEGIN, I WILL REVIEW SOME OF MBDA's ACTIVITIES OVER THE PAST YEAR. IN 1992, THE MINORITY BUSINESS DEVELOPMENT CENTERS (MBDCs) AND AMERICAN INDIAN PROGRAM (AIP) OF OUR ENTERPRISE DEVELOPMENT ACTIVITY ASSISTED NEARLY 17,000 MINORITY CLIENTS IN OBTAINING $1.4 BILLION IN PROCUREMENT CONTRACTS AND APPROVED FINANCINGS PRODUCING A RETURN ON INVESTMENT OF $64 TO $1. FROM THESE EFFORTS 1,362 NEW BUSINESSES WERE STARTED CREATING OVER 4,000 JOBS. OVERALL, THE 11,500 ESTABLISHED FIRMS THAT WERE ASSISTED BY MBDCs EMPLOYED OVER 112,000 PEOPLE.

IN 1993, WE ARE PILOT TESTING A NEW CONCEPT--THE MINORITY ENTERPRISE GROWTH ASSISTANCE (MEGA) CENTER IN CHICAGO. THIS CENTER EMPLOYS EXPERIENCED PROFESSIONALS WHO PROVIDE A MORE COMPREHENSIVE ARRAY OF TECHNICAL SERVICES THAN DO OUR TRADITIONAL CENTERS, TO CLIENTS IN EMERGING, HIGH GROWTH AND TECHNOLOGICALLY ADVANCED MARKETS. IN ADDITION, THE CENTER WILL USE ADVANCED ELECTRONIC INFORMATION SYSTEMS IN ASSISTING CLIENTS. THE MEGA CENTER SERVES ALL TEN MIDWESTERN STATES WITHIN THE CHICAGO REGION AUGMENTING AND SUPPLEMENTING THE LEVEL OF ASSISTANCE AVAILABLE IN TRADITIONAL CENTERS OF THAT AREA.

RESOURCE DEVELOPMENT

NOW LET ME TURN TO OUR RESOURCE DEVELOPMENT ACTIVITIES WHICH FOSTER AND PROMOTE BUSINESS OPPORTUNITIES IN THE PUBLIC AND PRIVATE SECTORS, PROVIDE BROAD-BASED SUPPORT FOR MARKET AND CAPITAL DEVELOPMENT, AND ENCOURAGE ENTREPRENEURSHIP.

PUBLIC SECTOR PROGRAMS

OUR PUBLIC SECTOR PROGRAMS CONTINUE TO ENCOURAGE THE DEVELOPMENT AND GROWTH MINORITY-OWNED BUSINESSES BY PROMOTING THE MOBILIZATION OF RESOURCES IN FEDERAL, STATE AND LOCAL GOVERNMENT SECTORS.

AT THE FEDERAL LEVEL WE EVALUATE FEDERAL AGENCIES COMMITMENT TO MINORITY OWNED BUSINESS THROUGH OUR REVIEW OF THEIR ANNUAL PROCUREMENT AND FINANCIAL ASSISTANCE GOALS AND ACCOMPLISHMENTS. WE ALSO DEVELOP INTERAGENCY AGREEMENTS WITH FEDERAL AGENCIES WHICH FURTHER PROMOTE MINORITY BUSINESS OPPORTUNITIES.

TO ENCOURAGE STATE AND LOCAL GOVERNMENT INVESTMENT IN MINORITY BUSINESS, WE ARE CONDUCTING A SERIES OF REGIONAL CONFERENCES WHERE STATE AND LOCAL DECISION MAKERS DISCUSS LONG TERM STRATEGIES FOR MINORITY BUSINESS PROGRAMS AND IDENTIFY OPPORTUNITIES FOR MINORITY FIRMS WITHIN THEIR COMMUNITIES.

WE ARE ALSO MAINTAINING FUNDING TO OUR MINORITY BUSINESS OPPORTUNITY COMMITTEE (MBOCs) PROGRAM IN CHICAGO, PITTSBURGH, HOUSTON AND LOS ANGELES. THESE MBOCs WILL CONTINUE TO IDENTIFY FEDERAL PROCUREMENT OPPORTUNITIES IN THE REGIONS WHERE THEY ARE LOCATED.

PRIVATE SECTOR PROGRAMS

THE PRIVATE SECTOR PROGRAM ACTIVITY CONTINUES TO PROMOTE MBDA's FRANCHISE AND INTERNATIONAL TRADE INITIATIVES. LAST YEAR, MBDA, IN CONJUNCTION WITH THE INTERNATIONAL TRADE ADMINISTRATION (ITA), LED TRADE MISSIONS TO THE PERSIAN GULF AND TO MEXICO. THE PERSIAN GULF DELEGATION NETTED 459 SALES LEADS AND $3.5 MILLION IN EXPORT SALES. THE TWO DELEGATIONS TO MEXICO RESULTED IN OVER 200 SALES LEADS, A $40 MILLION CONTRACT, A JOINT VENTURE AND THE OPENING OF A FOREIGN SALES OFFICE IN MEXICO.

THE AGENCY WILL CONTINUE TO PROMOTE MINORITY FIRMS AND PRODUCTS THROUGH TRADE MISSIONS AND OTHER MARKET OPPORTUNITIES.
THE NUMBER OF FUTURE MISSIONS AND THE COUNTRIES WE TARGET WILL DEPEND ON OUR ABILITY TO LEVERAGE EXISTING RESOURCES WITH ITA, THE SMALL BUSINESS ADMINISTRATION, THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND THE EXPORT-IMPORT BANK.

WE ARE CONTINUING THE FRANCHISE SEMINARS EXPOSING POTENTIAL FRANCHISEES TO INFORMATION ABOUT THE REQUIREMENTS, RISKS AND REWARDS OF THIS $750 BILLION INDUSTRY. WE EXPECT TO REACH OVER 3,000 PROSPECTIVE FRANCHISEES THROUGH THIS EFFORT.

IN THE AREA OF TECHNOLOGY, MBDA HAS FUNDED TWO INITIATIVES-- "COMTRAIN" AND "TELECAP"-- WHICH WORK TO IMPROVE THE NUMBER AND EXPERTISE OF MINORITIES IN THE TELECOMMUNICATIONS INDUSTRY. CURRENTLY, MINORITY FIRMS REPRESENT ONLY .5% OF THE TOTAL U. S. FIRMS IN THE TELECOMMUNICATIONS INDUSTRY. "COMTRAIN" SEEKS TO IMPROVE MINORITY REPRESENTATION IN THE TELECOMMUNICATIONS INDUSTRY. WORKING WITH THE NATIONAL TELECOMMUNICATIONS AND INFORMATION AGENCY, WE MATCH NEW TELECOMMUNICATIONS PROPERTY OWNERS WITH ESTABLISHED MULTI-UNIT OWNERS WHO SERVE AS MENTORS AND ADVISORS TO THE NEW OWNERS. TO DATE, TWO STATION OWNERS, OPERATING IN OHIO AND MISSOURI, HAVE SUCCESSFULLY COMPLETED THE PROGRAM. MBDA IS CURRENTLY NEGOTIATING TO CONTINUE THIS PROJECT. IT IS EXPECTED THAT MORE THAN 15 POTENTIAL MINORITY TELECOMMUNICATIONS PROPERTY OWNERS WILL BE MATCHED WITH A MENTOR BY 1994. ONE OF THE

CRITERIA FOR SELECTION IN THE PROGRAM IS A COMMITMENT BY THE TRAINEE TO MENTOR FUTURE MINORITY TELECOMMUNICATIONS OWNERS. "TELECAP", OUR OTHER TELECOMMUNICATIONS INITIATIVE, IS INTENDED TO PROVIDE AN INVESTMENT AND CAPITAL DEVELOPMENT MODEL FOR MINORITIES TO ENTER AND PARTICIPATE IN TELECOMMUNICATIONS AND OTHER HIGH TECHNOLOGY INDUSTRIES.

ADVOCACY, RESEARCH AND INFORMATION

NO PROGRAM CAN STAY PRODUCTIVE AND COMPETITIVE WITHOUT PERTINENT ON-GOING RESEARCH, DATA COLLECTION AND INFORMATION DISSEMINATION. MBDA'S ADVOCACY, RESEARCH AND INFORMATION ACTIVITY PROVIDES SUCH SUPPORT. ADVOCACY ACTIVITIES PUBLICIZE THE CAPACITIES OF MINORITY ENTREPRENEURS AND SEEK TO PROMOTE A MORE POSITIVE ATTITUDE WITHIN THE GENERAL POPULATION TOWARD THEM. LAST YEAR, OUR MINORITY ENTERPRISE DEVELOPMENT (MED) WEEK OBSERVANCE, A MAJOR ADVOCACY EVENT, ATTRACTED OVER A THOUSAND PARTICIPANTS FROM MINORITY FIRMS, MAJOR CORPORATIONS, TRADE ASSOCIATIONS, STUDENTS AND ALL LEVELS OF GOVERNMENT. OUR CONGRESSIONAL RECEPTION PROVED SUCCESSFUL NETWORKING EVENT. WE ARE ENCOURAGED BY THE GROWING CONGRESSIONAL AND CORPORATE SUPPORT, AND THIS YEAR WE EXPECT HIGH LEVELS OF PARTICIPATION. OTHER ADVOCACY RELATED ACTIVITIES INCLUDE OUR PARTICIPATION IN TRADE SHOWS AND CONVENTIONS. LAST YEAR, AT THESE EVENTS, WE DIRECTED OVER 100,000 POTENTIAL CUSTOMERS TO PROGRAMS, MARKETS AND MINORITY VENDORS.

RESEARCH ACTIVITIES WILL CONTINUE TO IDENTIFY THE NEEDS AND IMPACT OF MINORITY OWNED BUSINESSES AND TO RECOMMEND POLICY AND PROGRAM DIRECTION TO ENHANCE MINORITY BUSINESS DEVELOPMENT. BUSINESS INFORMATION IS CRITICAL TO THE SUCCESS OF ANY BUSINESS.

OUR INFORMATION ACTIVITIES GATHER AND DISSEMINATE INFORMATION ABOUT MINORITY BUSINESSES TO THOSE WISHING TO DO BUSINESS WITH MINORITY ENTERPRISES AND TO THOSE SEEKING BUSINESS OPPORTUNITIES.

BUDGET REQUEST

IN CONCLUSION, WE ARE PROUD TO BE A PART OF THE PRESIDENT'S ECONOMIC AGENDA. OUR PROPOSAL REPRESENTS AN INVESTMENT IN OUR COUNTRY'S LONG TERM ECONOMIC SECURITY, MAKING CONTRIBUTIONS IN THE AREAS OF JOB CREATION, TRADE AND TECHNOLOGY. WE ARE SEEKING $45,381,000 FOR FY 1994. INCLUDED IN THIS REQUEST IS $2,492,000 IN ADJUSTMENTS-TO-BASE AND AN INCREASE OF $5 MILLION TO FUND UP TO THREE ADDITIONAL MEGA CENTERS.

IN ADDITION WE APPRECIATE THE COMMITTEES SUPPORT OF OUR FY 1993 SUPPLEMENTAL REQUEST.

MR. CHAIRMAN, THIS ENDS MY STATEMENT. I WILL BE PLEASED TO ANSWER ANY QUESTIONS FROM YOU OR THE COMMITTEE.

OMB REQUEST

Mr. SKAGGS. Thank you. What did you request from OMB for next year?

Ms. YOUNG. $45,381,000, and the Department worked very closely with OMB, and we didn't get any changes.

Mr. SKAGGS. Well, this is a remarkable morning.

Ms. YOUNG. Yes, it is, and it will be more remarkable if we get our $45 million.

MBDC PROGRAM

Mr. SKAGGS. I am interested in the methodology underlying your statement that you have seen a return on investment of $64 for every dollar put in for the Minority Business Development Centers. How did we make that computation?

Mr. ENCINIAS. I am the Acting Associate Director for the Office of Operations of the Minority Business Development Agency. We take the funding that we provide for the MBDC and for the Indian programs and then we take all of the financings and procurements that are obtained through our centers assisting clients and all of the hours of technical assistance. We put a value on those of $50 an hour, and we do the calculation. We divide the funding into the total of the sum of all of those parts. It is assistance that we give directly that produces these results, and that is how we calculate it. It is a return on funding really.

Mr. SKAGGS. Well, I am used to return on investment terminology in, let's say, the Head Start program or immunization where we are talking about monies that the Government might otherwise, or some level of Government might otherwise be spending that is saved, or in new job creation that may come as a result. It seems to me that in this area, these are economic activities that are now under your jurisdiction, but would have occurred somewhere else if the program were not present.

Is that a fair assessment?

Mr. ENCINIAS. Well, since we are dealing with minority firms, I don't know if this would have occurred elsewhere, since we are the only agency that deals exclusively with minority firms. And we do provide direct assistance to these firms to achieve these results.

Mr. SKAGGS. Are you attempting to apply the same kind of return on investment analysis to the COMTRAIN and the TELECAP programs?

Mr. ENCINIAS. I don't work in that area, sir.

PRIVATE SECTOR

Mr. HOOKS. I am Robert Hooks, Chief of Resource Development. In terms of COMTRAIN and TELECAP, we don't invest the type of resources from our budget that we do in the MBDC area. When you take COMTRAIN, we have only put about $100—some-thousand or less than that each year, and in terms of telecommunications, we put about $345,000. I think we will be able to do it at some time in the long term, but not in the immediate future.

Ms. YOUNG. Let me make a comment on that. Those two programs that you mentioned are initiatives that we have gotten started, and it is not part of a hard program, let's say. We are working on those initiatives. We have been working in conjunction with other agencies in the Department on those initiatives and we see those two initiatives as being re-invested, you know, into a stronger program later, but we haven't gotten there yet.

MEGA CENTER

Mr. Skaggs. I understand that they are relatively new programs. I wondered whether you were looking at applying the same kind of investment return assessment as you are doing with the MBDCs.

You are pilot testing the MEGA center approach in Chicago and have requested an additional $5 million for fiscal 1994 for three more of those centers to open. Last year you asked for $2 million to fund four, and now you are asking for $5 million to fund three. Am I misreading the numbers?

Ms. Young. I think so, sir. I think that we asked—I don't remember the exact amount we asked for last year, but the $2 million was for one MEGA center. Yes, it was $2 million asked last year for one.

The reason we are asking for this $5 million for the additional MEGA centers is because we want to fund up to three, but one of them, and this includes re-funding the Chicago MEGA center, and funding two others in two different regions. And the reason we want to do this, is that I understand that 3.8 million for two is what is needed, and the other will be to re-fund the Chicago MEGA center.

Mr. Skaggs. What is your thinking, given that the Chicago effort is still in a pilot program kind of stage, as to when we will know enough about how that one has worked to properly evaluate it, and apply the results of that evaluation to create new MEGA centers? And what ought to be the staging of that, so that we are taking advantage of Chicago to deal intelligently with others?

Ms. Young. At the end of this month we will be getting the quarterly report from the Chicago MEGA center, because the first two quarters were startup staffing and really getting them going. We will be able to do an analysis of their report.

But we are proud of that investment, and before we even get the quarterly report in that will give us numbers of businesses assisted, we have been able to get some very good feedback. Never in the history of MBDA through our local MBDC have we been able to tap into a Nissan dealership, and we feel good about that, because the MEGA center has tapped into that.

Traditional MBDC have gotten support from the cities that they have been in, but they haven't had the caliber of staff to go out and really market and pull in corporate America and Federal agencies to really work with them the way that the MEGA center has, and there has been a lot of things that we have been told from corporate America, and with this Nissan dealership that we have been able to see that this was a good investment for us.

With the kinds of components that the MEGA center has, we have heard of a lot of assistance, and I want to put it that way, because you know, you want to see the report when it comes in so that you can see these things that have been told you. We just find that the MEGA center has offered today the knowledge that we thought it would. The other MBDCs in the area have tapped into the MEGA centers. From the MBDC's numbers of what they have been able to get from the MEGA center being there is what we had hoped would happen. Clients have contacted the MBDC, the MBDC have been able to tap into the MEGA center and deals have been made. So we feel very good about that.

Mr. SKAGGS. I believe you were here and were able to listen to some of the Inspector General's testimony and his concerns about the need for appropriate tools to construct and evaluate additional grant monies, and we spent some time talking about that in the NIST context. I would assume that the same thing would pertain to the expansion of the MEGA center program that you are requesting, and perhaps if you could submit for the record at whatever level of detail seems most useful, the program evaluation tools that you are applying; what were your objectives in the MEGA center; what have the results been; how do those comport with each other, so that we can have your best sense of what the benchmarks were, where you are relative to meeting them, what went wrong, and what went right.

I gather that I was misreading the number three as being three in addition to Chicago. It is Chicago, plus two; is that right?

Ms. YOUNG. That is right, sir.

Mr. SKAGGS. Okay. And where are you expecting the other two centers to be located?

Ms. YOUNG. Wait a moment. Just a second, please. It is up to four, including Chicago.

Mr. SKAGGS. So is it Chicago, plus two, or Chicago, plus three?

Ms. BOULWARE. Chicago, plus three.

Mr. SKAGGS. And where would the three additional centers be placed?

Ms. YOUNG. In each one of our—well, we want to do five more and they will be in each region. Right now, because of the studies that have been done, we would say L.A., Washington, and I am not sure about the other one yet. But we have done supply and demand study, and Peat Marwick did a study for us that laid out where these MEGA centers should strategically be.

Mr. SKAGGS. Well, L.A. would serve what area?

Ms. YOUNG. The State, L.A. would serve the City of Los Angeles. But the outlying cities, metropolitan area would feed into that MEGA center.

Mr. SKAGGS. So we shouldn't necessarily assume that because Chicago is a multi-state MEGA center that all of these would have multi-state jurisdictions?

Ms. YOUNG. I would say so.

Mr. ENCINIAS. Yes, sir. They would be located in the Los Angeles metropolitan statistical area, but it would service our San Francisco region, which is comprised of Federal regions, nine and ten. I believe it goes all the way from Los Angeles to Washington State, and includes Arizona and Idaho, Iowa—not Iowa, but that region, it is regions nine and ten.

Mr. SKAGGS. And the Washington, D.C. MEGA center would be basically a mid-Atlantic center?

Mr. ENCINIAS. Yes, sir.

Mr. Skaggs. Is that what is envisioned?

Ms. Young. That is right.

Mr. Skaggs. Are there currently Minority Business Development Centers in these areas, I assume, so that this is again an integration of——

Ms. Young. Yes, they are.

[Clerk's note.—Subsequent to the hearing, the following information was submitted.]

THE MEGA CENTER INITIATIVE

Purpose and Objectives:

The MEGA Center Initiative is an innovative effort designed to address the more advanced, complex business needs of minority entrepreneurs as they enter into more aggressively competitive business arenas. As with all Agency efforts, the key objectives of the MEGA Center Initiative are as follows:

- Promote minority business at the national, state, and local levels in both the private and public sectors to improve economic security and create more jobs.
- Provide hands-on professional business assistance to minority entrepreneurs, to create more investment, greater revenues, more jobs.
- Facilitate minority business access to markets, capital, and business information to improve their competitive position in the marketplace, thereby contributing to the health, and productivity of the national economy.

What makes this client service initiative different than other Agency efforts is that MEGA centers will have more, experienced personnel to provide complicated technical services for their minority clients in high growth markets, such as franchise development, international trade, capital development, construction assistance and bonding, as well as high tech and other emerging industries. In addition, MEGA Centers will utilize advanced electronic information systems in assisting their clients. The expanded services of the MEGA Centers are intended to enhance the size, profitability and viability of minority-owned businesses and increase job opportunities.

Evaluation Tools:

MBDA addresses program performance in three basic ways. First, the Agency requires specific minimum qualitative and quantitative performance goal levels based upon the minority concentration and characteristics of each of its geographic service areas. Second, the Agency periodically reviews and rates performance throughout the course of an award. Finally, it evaluates the overall cumulative performance based on the findings.

The MEGA Center initiative has two types of key performance indicators:

- Quantitative Performance Indicators measure such areas as professional hours of service to minority clients, the number of minority clients assisted, the dollar value of financing approved for minority clients, and the dollar value of procurement contracts approved for minority clients.

- Qualitative Performance Indicators measure client satisfaction with services rendered, market research and promotion activities, and quality control systems of the MEGA Center.

Year-to-Date Performance Results:

The twelve month, minimum quantitative performance goals for the pilot MEGA Center in Chicago are as follows:

Performance Indicators	Performance Goal Levels
Hours of Management & Technical Assistance	24,000
Number of Minority Clients Assisted	474
Combined Dollar value of Financial Packages and Procurements	$34,000,000

The year-to-date (three months) actual performance of the MEGA Center is as follows:

Performance Indicators	Y-T-D Goal	Y-T-D Actual	Percent Achievement
Hours of Management & Technical Assistance	2,000	1,182	59.1
Number of Minority Clients Assisted	50	62	124.0
Dollar Value of Financial Packages	100,000	967,000	967.0
Dollar Value of Procurements	100,000	154,650	154.7

To substantiate MBDA's program requirements, program evaluation guidelines were established based on client satisfaction, the ability to attract and retain public and private sector resources, the ability to perform in areas of capital and market development, construction and technology with a higher level of expertise than the traditional business centers. Preliminary evaluations have surfaced the following strengths and improvements.

Concept Strengths:

The client satisfaction rating for the first quarter of performance was 100%. According to our monitors, client written responses were enthusiastic regarding the MEGA Center and its services.

There were a number of ideas tested under the pilot award that proved to be quite successful. First of all, both the construction and capital development functional components are doing very well. Of particular interest is the Surety Review Panel which is made up of representatives from the American Association of Sureties and the Association of Bond Producers. This panel has been quite successful in obtaining bonds for minority contractors at reasonable rates, which is a major accomplishment for minority firms in the construction industry.

The center also obtained 8,000 square feet of prime office space in the Loop as an inkind contribution from a bank in Chicago, where the MEGA Center headquarters is located. The consortia is made up of experts in their field. For example, the capital development component is subcontracted to a firm which is an expert in the venture and equity capital markets. The two minority banks in Chicago are working closely with the center so that the center will automate its finance packages. The Mega Center was enthusiastically and rousingly received by the minority business community. It received thousands of phone inquiries during its first quarter of operations. MBEs in the area think the MEGA Center concept is needed and will be successful.

Improvements:

The MEGA Center in Chicago did not allow sufficient time for start-up activities. The MEGA Center was formed via a consortium of five different organizations. Time was needed to come together, arrange and set up office space, and computer hardware, software, and networking requirements. In addition, the center was over publicized before it was ready to open its doors.

Any future MEGA Center must have an initial award period of at least 18 months including a four month startup period.

1993 PROGRAM MANAGEMENT

Mr. SKAGGS. The President's investment package, as I understand it, includes some money to replenish your base for this fiscal year. What happens if that package is not adopted?

Ms. YOUNG. Sir, it doesn't only include money to replenish; it includes some emergency money that we need. If we do not get that money, project monitors and program monitors will not be able to monitor the projects, and we have done very little monitoring this year, because we have been living from day-to-day. The possibility exists that we would have to furlough staff. That would—but we thought about that, and we are talking to the administration, because if all of the politicals don't come on, then we might be able to skate around some of that.

But the worst thing is that we cannot do outreach. And when we do outreach we are able to tap potential customers that go through the centers. When these customers go through the centers and become clients, businesses are created, then that means people are employed. So the loss of this money hurts MBDA. It hurts the field, it hurts the MBDC and projects in the areas.

And when I say "projects", I am talking about the Minority Business Development Centers will lose, also. And jobs are not created, businesses are not started, and businesses are not expanding. So it is a loss for us if we do not get the money.

1994 PROGRAM MANAGEMENT

Mr. SKAGGS. What is the minimum that you need to avoid a furlough or a RIF circumstance?

Ms. YOUNG. Well, we had requested 1.8, and believe me, we could use 1.8 or 2 million. But if you gave up about 1.5 to 1.7—we figured it out last week and said 1.7. But if we got 1.5, we could make it.

Mr. SKAGGS. Maybe we could get you all into a bidding war here, get it down under a million.

AUTHORIZING LEGISLATION

Mr. SKAGGS. What is the status of an administration proposal for authorizing legislation for your agency?

Ms. YOUNG. Right now Secretary Brown is actively reviewing that, and at this stage I don't know. Secretary Brown is actively reviewing it, and as you know, we still are existing under an executive order. Anything that you all can do to speed that up, that would help, too, because it would just enhance our program.

Mr. SKAGGS. You don't have a sense of the timetable?

Ms. YOUNG. I really don't.

Mr. SKAGGS. For an administration request for an authorization?

Ms. YOUNG. No.

Mr. SKAGGS. The carryover that existed from fiscal 1992 to fiscal 1993 was about $5.667 million. You don't show any carryover from 1993 to 1994. I am interested in both the explanation for the substantial amount that came into this fiscal year, and I think I know the answer as to why there is no carryover to the next fiscal year, but if you could respond.

Ms. YOUNG. Well, I am glad to say that we don't have one and we won't have one this year, we don't have anything to carry over.

Ms. Boulware. Of the 5.6 million that carried over, 2 million of that was for hurricane relief which we received too late in the year to expend. About another 650,000 of that came from the riot money that was waiting also to be obligated. A great portion of it came from what we call unassigned funds, which are recoveries from prior year obligations and debt collections that comes too late in the year to spend.

So of that amount, approximately 2.3 represented projects that were—you could legitimately call carryover, and those have been obligated now. In addition, because of our burden for audits that we must do for which we have never received funds, plus the decrease of a million dollars that we got in our program account, we don't anticipate having any carryover this year.

Mr. Skaggs. I am sorry, would you identify yourself for the record, or did I miss that?

Ms. Boulware. No. I am sorry. My name is Harolyn Boulware and I am Budget Officer for MBDA.

AUDIT REPORT

Mr. Skaggs. A couple of years ago GAO did a report identifying some program weaknesses. Would you just give me a quick description of the efforts that the agency has made in the last two years to address the GAO-identified program weaknesses?

Ms. Young. I am going to address both the GAO and the OIG.

Mr. Skaggs. Please.

Ms. Young. I am proud to say that MBDA as of this day is not on high risk. The management recommendations that GAO requested have been taken care of. There may be one outstanding, and I think that one is getting an auditor for our debt management branch. When we get the approved stimulus package that I know that we are going to get, then we can take care of that one.

But the management recommendations from them, and the hiring of people was not able to be done in some cases, but we were able to detail people to correct the internal control weaknesses that they had predicted.

Mr. Skaggs. Just looking at one of these, and it is relevant I think to our earlier discussion I think about the MEGA centers, the second recommendation was to provide for—the third, develop meaningful performance standards that allow MBDA to determine whether projects achieved planned goals, and that is a more succinct way of stating what I was trying to get at with respect to the the other project. So if you could in your response for the record do it in terms of the program evaluation recommendations that GAO identified, that would be particularly helpful.

Ms. Young. Okay. Very good. We will do that.

[The information follows:]

GAO Report

To satisfy GAO's recommendations on program evaluation, qualitative performance measures were increased from 35 to 50 points. These performance measures include client satisfaction, market research & promotion, client inventory and quality control. GAO's recommendations are reflected in detail in the response to the earlier question on MEGA Centers.

Mr. SKAGGS. We will have some more questions which we will ask you to respond to for the record and we appreciate your being here this morning and your good work.

Ms. YOUNG. Thank you very much.

[The following questions were submitted to be answered for the record:]

QUESTIONS FOR THE RECORD SUBMITTED BY CONGRESSMAN SKAGGS

MEGA CENTER

QUESTION:

Although you are pilot testing the one MEGA Center in Chicago, you have requested an additional $5 million in FY 94 for three more to open. How long is the "pilot test" scheduled to last and what are the criteria that will be used to evaluate 1) if the Chicago MEGA Center is successful, and 2) whether the three additional MEGA Centers should be opened?

ANSWER:

The Chicago MEGA Center is the pilot of a new concept--state-of-the-art assistance centers that serve start-up and existing minority businesses with enhanced services. The cooperative agreement is for one year, subject to two annual renewals contingent on its success and the availability of funds. The main criteria used to evaluate it are: (1) whether it meets its goals regarding the numbers of clients assisted; (2) the quality of the assistance provided; (3) the numbers of procurements and financial packages approved; and (4) the amount and quality of the hours of technical assistance provided.

Actual performance for the first three months indicate that the center has exceeded all but one of its quantitative goals by well over 100%. To augment MBDA's program requirements, program evaluation guidelines were established based on client satisfaction, the ability to attract and retain public and private sector resources, the ability to perform in areas of capital and market development, construction, and technology with a higher level of expertise than the traditional business centers. Other criteria used are whether the center is acceptable to the minority business community, the banks, government and private sector procurement agencies and other interested parties.

The future of the MEGA center approach to business assistance is contingent upon the success of the Chicago MEGA center. The areas selected for the additional Mega centers will be Metropolitan Areas with the largest concentrations of minority populations and minority businesses. These communities require a different type of business assistance; that is, they require services for start-ups, existing and expanding businesses. It is not cost effective to operate centers in smaller, or rural areas, with sparser minority populations and businesses.

QUESTION:

Your 1994 request shows no increase in personnel over the 1993 appropriated level. If you open the MEGA Centers, will you have adequate staff to oversee these new centers?

ANSWER:

No additional staff will be needed. The MEGA Centers, like MBDA's traditional centers provide management and technical assistance to minority clients through cooperative agreements with private sector business consultants. The center's staff is made up of non-federal personnel who provide client intake and referral as well as such services as business and market plan development and loan packaging. MBDA field staff, located in six regional offices, monitor the center's performance. In addition, headquarters staff has oversight of both the regions and their projects and programs. The addition of MEGA Centers will not increase staff requirements.

QUESTION:

If the $5 million is approved, is this a one time cost to get the MEGA Centers started or is this a permanent added cost of having four MEGA Centers?

ANSWER:

The $5 million will be a permanent added cost of having up to four MEGA Centers.

QUESTION:

Why would you only be able to outlay half of the $5 million in FY 94?

ANSWER:

MBDA's historical first year program outlay rate is 50%. Because the process for awarding competitive cooperative agreements takes a minimum of 120 days, first year projects are awarded no earlier than four months from the date of appropriation. Funds may then be drawn down by the recipient monthly, based on need. For new projects, start-up costs are generally lower than full operational costs resulting in negligible outlay for the first few months of operation. This rate has been accepted by OMB as MBDA's traditional first year outlay rate.

QUESTION:

If the MEGA Center project is deemed to be successful, would the Agency consider restructuring its entire operation under the MEGA Center concept?

ANSWER:

From the MEGA Center, the agency will learn what components can be added to other business assistance centers. For instance, smaller areas where there will be substantial federal transportation spending may need specialists in construction bonding so that minority companies can participate. The MEGA Center, which has construction bonding assistance will demonstrate what types of construction bonding assistance are useful for start-up minority construction firms. Our BDCs need to be upgraded and the MEGA Centers provide us a mechanism to determine how they should be upgraded.

It would also add some of the additional program components which the MEGA Centers have in other areas of the network where they are needed, such as international trade and specialized construction contractor assistance. The strategy of the agency is to place a MEGA Center in each of the six MBDA regions, and to have the MBDCs located in the respective regions access the additional services offered by the MEGA Centers for their clients.

QUESTION:

Is it feasible that the Mega Center concept could be applied to Indian tribe assistance?

ANSWER:

One of the MEGA Center's main concepts is to provide expanded and more sophisticated business services to clients within large metropolitan areas having more complex requirements than those of the regular centers.

The IBDCs would be linked with the MEGA Center in their region, if such a MEGA Center were opened. Moreover, from the MEGA Center we will learn what additional services can effectively be provided to the IBDCs such as foreign trade and tourism.

ADJUSTMENTS TO BASE

QUESTION:

Will the entire $5 million increase in the business development area go towards the MEGA Centers?

ANSWER:

The entire $5 million increase request is for the MEGA Centers.

TECHNOLOGY

QUESTION:

MBDA has funded two initiatives in the area of technology which will work to improve the number and expertise of minorities in the telecommunications industry: Comtrain and Telecap. How much money will be spent on each program in FY 93? How many participants are involved in each program?

ANSWER:

Comtrain is a training program for new minority radio and television station owners that is offered during the crucial start-up stage of business development. The purpose of the program is to provide a training experience that will contribute to building viable minority-owned broadcast enterprises. Comtrain is designed to train the new minority broadcast property owner through placement and mentoring with an established non-minority or multi-property minority broadcast operator. Comtrain is primarily conducted in two phases. Phase I provides executive training of two to five days at a broadcast station owned by a corporate sponsor. In Phase II, corporate sponsors donate management employees who volunteer to assess the operational systems of newly established minority-owned radio and television stations. The goal of the Comtrain program is to train 25 new minority broadcast owners over a three year period.

Comtrain was established by an Interagency Agreement between NTIA and MBDA. Its purpose is to improve the likelihood of success as well as the number of minority-owned communications facilities. NTIA's responsibility is to select participating broadcast associations, identify eligible participants, publicize Comtrain services function as a liaison between the minority-trainee and the association and perform follow-up evaluations and program modifications. MBDA is responsible for: funding Comtrain, publicizing the program, making the program available to its MBDCs throughout the country and training them in the use of the program.

To date, two station owners now operating in Ohio and Missouri have completed the training and 14 others are currently being trained.

In FY'93, no additional monies will be spent on Comtrain by MBDA. The initiative is operating under a prior year $181,000 interagency agreement.
The Telecap initiative was established by a Memorandum Of Understanding (MOU) between NTIA and MBDA to directly influence minority economic participation in the area of telecommunications. To implement Telecap, MBDA funded a $344,245 interagency agreement with NTIA ($244,245 in FY'91 and $100,000 in FY'92). An additional $100,000 was added after determining, from the first round of contract competition, that the original amount was not enough for the level of work required. In
FY '93 no additional funds will be spent for Telecap.

NTIA is the lead agency in Telecap and manages the project. The Telecap project has three phases - 1. Research, 2. Industry and leadership briefings and 3. MBDC training. The research effort will, through a contractor, identify and analyze key investment strategies, present case studies of

successful minority telecommunications businesses and develop new models for telecommunications investment and capital formation. In more specific terms, Telecap will report on the following:

1. Status of minority investments in the telecommunications industry

2. Initial capitalization of those investments

3. Capital structure of firm and how the capital was raised

4. Comparative case studies of 4-6 minority telecommunications properties and

5. Appropriate financial intermediaries to attract and pool funds from both the minority as well as the general financial community for investment in minority-owned telecommunications properties.

The research portion of Telecap is not designed for participants. It is a contract effort that will yield new models for developing capital for telecommunication businesses. The Telecap program's prospective participants are minority business investors and professional and business groups, MBDCs, and others who have a primary interest in telecommunications through joint business arrangements with minorities. MBDCs will participate in disseminating the research results.

Industry and leadership briefings, to be conducted by contractor will be coordinated by MBDA and NTIA. They will be targeted to minority business groups and leaders with a primary interest in telecommunications and others who may be interested in the results of this project.

MBDC training, to be conducted by contractor, will focus on the results of the study and how MBDCs can assist clients in telecommunications.

QUESTION:

In the Comtrain program, MBDA is working with NTIA to match new telecommunications property owners with established multi-unit owners who serve as mentors and advisors to the new owners. Is NTIA contributing any of the funding of this program? If so, how much will they contribute?

ANSWER:

No. The Memorandum of Understanding which governs the activities of MBDA and NTIA specifies that MBDA will provide funding for the Comtrain project and that NTIA will contribute staff and other Agency personnel and expertise as necessary.

QUESTION:

To date, two station owners have completed the Comtrain program. What is involved in completing the program? How long does it last?

ANSWER:

The Comtrain program is primarily conducted in two phases. Phase I, provides executive training of two to five days in duration at a broadcast station owned by a corporate sponsors. In Phase II, corporate sponsors donate management employees who volunteer to assess the operational systems of newly established minority-owned radio and television stations. Substantial periods of time may elapse between receiving FCC permits and actually building a station. Although the formal phase of Comtrain ends with Phase II, most trainees maintain on-going relationships with their station hosts.

The benefits to be gained from completing the Comtrain program are as follows:

- Hands on in-station internship through the Minority Executive Training Program. The core of this experience includes management models for the participant's own operation in such areas as personnel structure, ratings, sales, marketing strategies, equipment selection and engineering concerns, programming issues, legal and management issues and any other operational areas not deemed confidential.

- An evaluation of start-up operations by highly experienced and trained Volunteer Consultant Corps in the broadcasting industry to prevent or solve problems.

- Comtrain participants receive a package of an books, pamphlets and articles that provide information and instruction on areas of broadcast management in either radio or television, (e.g., Audience Ratings, Record Retention Guide, Developing an Effective Business Plan, Engineering Handbook, Personnel Guide, and Employee Compensation and Fringe Benefit Guide).

QUESTION:

Ultimately, if the new owners are successful under the Comtrain program, it provides more competition for the multi-unit owners which could decrease their market share and profits. Therefore, what incentive do the multi-unit owners have to do a good job of mentoring and advising the new members?

ANSWER:

In administering Comtrain, NTIA makes all corporate sponsors aware of the location of the new station and discusses any possible market conflicts with them. Collectively, corporate sponsors have over 100 stations sites across the country. They do not have to train a new owner who would be competition with any of their stations.

QUESTION:

What is the status of the Telecap program and the investment and capital development model that was discussed? Perhaps you can briefly describe your vision of the Telecap program and how it will help minorities to enter and participate in telecommunications.

ANSWER:

Telecap is a project to enable minority business persons and firms to more easily access the telecommunications industry. Since capital availability significantly affects the formation of minority businesses, the primary intent or Phase 1 of Telecap is to develop a model(s) for capital accumulation and investment. Phase 11 will inform the MBE community of the results and benefits of this research, and Phase 111 will provide MBDCs with training on how to use it to assist MBEs.

Telecap was awarded in December 1992 for a 12 month period of performance. Currently, the contractor is developing a model to pool minority resources and leverage public and private sector funds to create new sources of capital for minority telecommunications enterprises. NTIA has reviewed draft reports on the financial telecommunications industry and case studies of financial strategies used by minority telecommunications entrepreneurs. This research provides the foundation for the models which is the next step. The model(s) is due in July, 1993.

GSA RENT

QUESTION:

Where are the offices of the Minority Business Development Agency currently located?

ANSWER:

All Headquarters offices of MBDA are in the Hoover Building which is located at 14th & Constitution Avenue, N.W., Washington, DC. The location of the Agency's six regional offices and four district offices are as follows:

OFFICE/LOCATION

Atlanta Regional Office
The Summit Building
401 West Peachtree St., N.W.

Room 1715
Atlanta, Georgia
Chicago Regional Office
Mid-Continental Plaza Building
Suite 1440
55 East Monroe Street
Chicago, Illinois

Dallas Regional Office
Federal Office Building
Room 7B23
1100 Commerce Street
Dallas, Texas

New York Regional office
Federal Office Building
Room 3720
26 Federal Plaza
New York, New York

San Francisco Regional Office
Main Tower Building
Room 1280
221 Main Street
San Francisco, California

Washington Regional Office
Westend Court Building
Suite 701
1255 - 22nd Street, N.W.
Washington, D.C.

Boston District Office
Federal Office Building
Room 418
10 Causeway Street
Boston, Massachusetts

Los Angeles District Office
9660 Building
Suite 201
977 North Broadway
Los Angeles, California

Miami District
Federal Office Building
Room 918
51 S.W. First Avenue
P.O. Box 25
Miami, Florida

Philadelphia District Office
Federal Office Building
Room 10128
600 Arch Street
Philadelphia, Pennsylvania

QUESTION:

You are showing an increase of $122,000 in rental payments to GSA because rates are projected to increase by 7.35% in FY 94. Is this increase comparable to the increase in other Commerce agencies?

ANSWER:

Yes, this rate increase is comparable to the increase in other Commerce Agencies.

QUESTION:

Is there any chance that GSA will be adjusting their rates based on the current commercial real estate market? Do you feel the price you are paying GSA for space is a fair amount?

ANSWER:

There is always the chance that GSA will adjust their rates through negotiations based on the current commercial real estate market. The agency feels that the price being paid to GSA for space is a fair amount.

ADVOCACY

QUESTION:

What is the current circulation of Minority Business Today? Is it a free publication or is the price included in the fee that MBDA receives from its customers? What is your target audience for this publication?

ANSWER:

Minority Business Today, the MBDA business assistance program newsletter, is distributed to minority-owned businesses, minority business development advocacy organizations, members of Congress, federal, state and local government officials, MBDA-funded organizations, colleges and universities, libraries and to members of the public who request information on the availability of public and private sector minority business development programs, policies and issues. Current circulation consists of 8,000 direct mail copies and about 7,000 copies distributed by MBDA or its funded-MBDC staff at conferences, workshops and seminars and other public outreach events.

MBDA's free circulation policy is based on the long-standing difficulty that minority business owners and their advocates face in acquiring much-needed business development information. The publication provides minority business with information on Commerce activities such as NAFTA, TPCC, and export promotion.

MBDA PROCESS

QUESTION:

Briefly describe the process of how MBDA helps the typical minority who is asking for assistance and is interested in starting their own business.

ANSWER:

The typical minority client is referred to and goes to one of our centers. The potential client is interviewed to determine what his/her needs are. the center then provides information on the services that are available, the cost of the specific services and the length of time the engagement might take. The services provided usually involve developing a business/marketing/finance plan, assessing the financial condition and the skills and experience relating to the type of business he/she plans to open. It also involves analyzing his/her financial position and credit worthiness, and a determination of additional capital infusion requirements. The centers then assist the client in obtaining loans, surety bonds and other financial instruments. Upon obtaining financing the centers help the client with access to markets for his/her business. The marketing assistance includes help in obtaining sales opportunities, identifying potential procurements and linking with local purchasing officials.

QUESTION:

If I am not a minority, and I contact the MBDA about starting a business, would I receive any assistance from MBDA? If not, where would I be referred?

ANSWER:

In general, MBDA refers anyone who is not a minority to many of the other agencies which provide assistance to everyone. These might include SBA's university centers, other federal agencies, state and local government agencies, and private organizations.

PERFORMANCE AND COMPLIANCE AUDITS

QUESTION:

How many program and compliance audits will be performed in FY 93? How often do you anticipate auditing each of the Business Service Centers?

ANSWER:

All 103 MBDCs and IBDCs, which represent the total are scheduled to be audited. Based upon OMB requirement, MBDCs are to be audited annually. However, if an award not audited until the second year of operation, the first year of operation must also be audited at that time.

QUESTION:

Do you anticipate a similar timetable for the auditing of the new Mega Centers?

ANSWER:

Yes.

AMERICAN INDIAN PROGRAMS

QUESTION:

Part of MBDA's efforts go toward assisting American Indians. What percentage of MBDA's resources are devoted to programs for Indian business assistance?

ANSWER:

The American Indian population represents 3.23% of the total minority population in this country according to the 1990 census data and it makes up 1.76% of the total minority businesses in the U.S.A. according the 1987 Survey of Minority Businesses, the latest available data. MBDA has demonstrated its commitment to the Indian Community by funding the American Indian Program at approximately 8% of the total Enterprise Development program budget.

QUESTION:

What is the status of the Native American Business Association?

ANSWER:

The initial Native American Business Association award will end on May 30, 1993. The goal of the award was to create an American Indian trade association so that American Indians could market their products and services both domestically and internationally. They have achieved their goal.

MINORITY BUSINESS TRADE MISSIONS

QUESTION:

Budget justifications refer to the recent Minority Business Trade missions to the Middle East and Mexico conducted jointly with the International Trade Administration (ITA). What were the total costs of the trade missions, and what was the Federal contribution? Please provide specific details for the record.

ANSWER:

A preliminary accounting of monies spent for the three trade missions includes MBDA federal funds expended and non federal funds required of minority business participants as follows:

	Federal		Non Federal	
Middle East...	$33,763		...	
Mexico 92...	29,509	plus	$11,000	(Non-Federal)
Mexico 93.....	44,400	plus	19,500	(Non-Federal)
Totals.......	$107,672		$30,500	

QUESTION:

Are you planning to sponsor any additional international missions in this fiscal year, and if so, to where?

ANSWER:

No trade missions are scheduled for fiscal year FY'94.

QUESTION:

How do you measure the success of these trade missions?

ANSWER:

Trade missions are measured by ITA through end of event evaluations/quality assurance surveys to assess progress in the following areas where applicable to the objectives of the trade mission:

Tangible Results

- Number of targeted business contacts per delegate per site visit.

- Number and quality of U.S. foreign business relationships formed from missions e.g.:

. Joint Ventures	. Teaming Agreements
. Agent/Distributor	. Overseas Plant and Office Openings Agreements

- Number, size and duration of contracts from the missions

Intangible Results

- Communicating to foreign governments that the minority business community is capable of delivering quality goods and services

- Exposing MBEs to potential foreign subcontracting opportunities

- Exposing MBE participants to MBDA and DOC programs.

Middle East Mission Report

On January 9-21, 1992, MBDA and ITA jointly led a delegation of 17 minority businesses on a trade mission to the Persian Gulf. The purpose of the mission was to provide U.S. minority-owned firms
the forum to assess current and potential commercial opportunities in the Middle East. The Persian Gulf Mission results were as follows:

- The identification of $50 million in potential contracts in the Persian Gulf.

- A total of 459 sales leads over a two week period and $3.5 million in export sales.

- Three agent signings and two joint venture agreements

Mexico Trade Mission February 1992

Eleven minority companies were led by MBDA and ITA to

Mexico. During the mission, minority business entrepreneurs met with Mexican President Carlos Salinas de Gortari and other high level representatives from the public and private sectors to discuss how U.S. minority firms can increase their business in Mexico.

The results of the mission were as follows:

- Twenty-nine one-on-one meetings with Mexican businesses over a two-day period. Approximately two-thirds of these meetings were reported by participants as business leads.

- The opening of a foreign sales office in Mexico City by JEFA International, one of the companies represented on the mission. The approximate cost of the office is $250,000. JEFA subsequently landed a $40 million contract ($10 million over four years) as a result of its initial contacts both with the Mexican government and the Mexican private sector.

- An agreement, in principle, between SECOFI (the Mexican Department of Commerce) and the U.S. Department of Commerce to continue undertaking matching efforts between Mexican and U.S. firms.

Mexico Trade Mission February 1993

ITA and MBDA jointly organized a matchmaker trade delegation of 37 minority firms to Mexico City, February 22-24,1993 to match U.S. participants with potential agents, distributors, and joint venture or licensing partners.

The introductions made through this mission will position participating firms to take advantage of timely export opportunities arising from the North American Free Trade Agreement.

The end of event results of the mission were as follows:

- Pre-screened meetings with potential representatives, distributors and joint venture partners, arranged by the Commercial Section of the U.S. Embassy in Mexico City, generated over 389 appointments resulting in 164 sales leads.

- $36,120 in contract orders, three joint venture agreements and 13 representative agreements are pending

Trade mission participants will be surveyed in ten months by ITA's Matchmaker program staff.

RELATIONSHIP WITH THE SBA

QUESTION:

With the change in Administration, what is your current relationship with the minority business programs administered by SBA and with the Small Business Development Centers?

ANSWER:

MBDA's relationship with SBA is one of cooperation. The two agencies co-sponsor Minority Enterprise Development Week activities throughout the country, and in particular in Washington, D.C. The agencies have an interagency agreement whereby MBDA assists 8 (a) and graduate 8(a) firms. The agencies worked together in providing riot and disaster assistance in Los Angeles, Miami, Baton Rouge , and Hawaii.

QUESTION:

How do you avoid overlap with the SBA-administered programs?

ANSWER:

There is no overlap with the SBA programs. The programs of the two agencies complement each other. MBDA refers many people to the SBDCs for training while the SBDCs hand refer many of their clients to MBDCs for loan packaging, 8(a) certification, and marketing services, particularly for those trying to locate procurement and business opportunities. As a lender, SBA cannot prepare loan packages or applications because to do so would constitute a conflict of interest. MBDA, on the other hand, does prepare loan packages for its minority clients because MBDA is not a lending agency. The same is true of 8(a) certifications ,i.e., the certifying agency (SBA) cannot assist the 8(a) applicant in preparing the application while MBDC can.

CLOSING THE "GAP"

QUESTION:

For the purposes of providing assistance to minorities, what is MBDA's definition of a minority?

ANSWER:

MBDA's definition of a minority includes, " Blacks, Puerto Ricans, Spanish-Speaking Americans, American Indians, Eskimos, Aleuts, Hasidic Jews, Asian- Pacific Americans, and Asian Indians.

QUESTION:

Even though 25% of the current population is black, only 6% of all businesses are black-owned. What specifically is your agency doing to close this gap?

ANSWER:

All minorities, including blacks, account for 25% of the population and only 6% of the number of businesses.

This gap will be closed by substantially increasing the number of minority-owned firms and the gross receipts and employees generated by those firms by providing management and technical assistance in developing business plans and by increasing access to capital and markets. MBDA currently provides management and technical assistance to minority companies and has worked with the Administration in its community banking initiative as an important new capital source for small businesses.

Our Minority Business Development Centers(MBDCs) and Indian Business Development Centers(IBDCs) assist in the formation of new firms and the expansion of existing firms.

Our national initiatives in franchising, telecommunications, tourism, capital development and international trade provide information about additional resources and market opportunities that the MBDCs can make available to prospective and existing minority entrepreneurs.

These initiatives combined with pilot programs such as the MEGA centers are designed to increase the number of firms that have substantial growth potential.

QUESTION:

By the year 2050, it is projected that 48% of the U.S. population will be minorities. What long-term goals does your agency have to keep up with the increase so the "gap" does not widen any further?

ANSWER:

Secretary Brown has made a commitment to placing minority business development higher on the nation's policy agenda. His goals include:

o Submitting legislation to codify MBDA's mission and programs.

o Determining methods to more effectively use MBDA's financial and human resources, so that larger numbers of clients can be assisted to start and expand businesses.

o Encouraging greater utilization of resources available for minority business development in state and local governments, the private sector and minority communities.

o Assisting minority firms in penetrating domestic and international growth markets.

o Establishing the foundation to encourage minority youth to prepare for careers as an entrepreneurship.

QUESTION:

How much is the fee that you charge customers for the services provided by the MBDA Business Service Center? Do you think this fee is preventing any minorities from seeking your services?

ANSWER:

The fees which the MBDCs charge are $10 per hour for those clients with gross receipts of under $500,000 per year, and $17.50 per hour for those which gross more than $500,000. These are highly subsidized fees for services provided by accountants,CPAs, professions marketing consultants, professional construction assistance. The going market rate for some of these same services is $ 100 or more per hour.

We do not think that these fees prevent minorities who are serious about going into business from seeking the services of our centers. The demand for our services keeps increasing every year as proven by the increase in the number of clients who use the services of our centers. The fees have the effect of weeding out those people who perhaps are not ready to own a business from those who are. In fact since the imposition of fees the number of minorities seeking our assistance has increased. The number of clients using the MBDC centers in FY 85 was 13,866. In FY 91 it was 16,603.

MBDC/AIP

QUESTION:

The MBDA Business Service Center and the American Indian Program was to be reconstituted in FY 93. Has this been done, and if it has, can you provide the current status of these programs?

ANSWER:

The above programs were not reconstituted in 1993 because the agency appropriation for FY 1993 was below the amount requested.

QUESTION:

In FY 94, in the MBDC and the IBDC programs, you are projecting a 15% decrease in business starts and jobs within starts compared to FY 93. Why do you anticipate a decrease of this proportion?

ANSWER:

MBDA's program measurements for centers in FY 1994 are divided into performance by traditional centers and performance by MEGA centers. These two of performance indicators must be considered together to determine total FY 1994 business starts. Establishing MEGA centers will decrease business starts attributable to traditional centers. MEGA Center performance in those areas will increase business starts. As a result, overall starts will increase approximately 9% in the Enterprise Development Program.

REORGANIZATION

QUESTION:

In FY 92, the agency was to initiate the second phase of the reorganization. Has this reorganization been completed? How has it improved your agency and the services it provides?

ANSWER:

The second phase of the reorganization did not take place. The second phase calls for a reorganization based on functional responsibilities and relationships. The previous administration decided to defer any reorganization plans until after the Presidential election. The issue of reorganization is currently being reviewed.

THURSDAY, APRIL 22, 1993.

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

WITNESSES

THOMAS J. SUGRUE, ACTING ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION

CHARLES M. RUSH, CHIEF SCIENTIST

DENNIS R. CONNORS, ASSOCIATE ADMINISTRATOR, OFFICE OF TELECOMMUNICATIONS APPLICATIONS

GAY SHRUM, BUDGET OFFICER

MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH of Iowa. The first item we will consider this morning is the fiscal year 1994 budget request of the National Telecommunications and Information Administration (NTIA) of the Department of Commerce. The request totals $94,563,000, including: $21,927,000 for Salaries and Expenses appropriation; $20,636,000 for the Public Telecommunications Facilities Planning and Construction (PTFP) program; $1,000,000 for the Endowment for Children's Television; and $51,000,000 for a new National Information Infrastructure (NII) program. The request is, in total, an increase of $54,343,000 over the amounts provided to NTIA for FY 1993.

We will insert the justification materials submitted in support of this request into the record at this point.

[The justification follows:]

Department of Commerce
National Telecommunications and Information Administration
BUDGET ESTIMATES, FISCAL YEAR 1994
CONGRESSIONAL SUBMISSION

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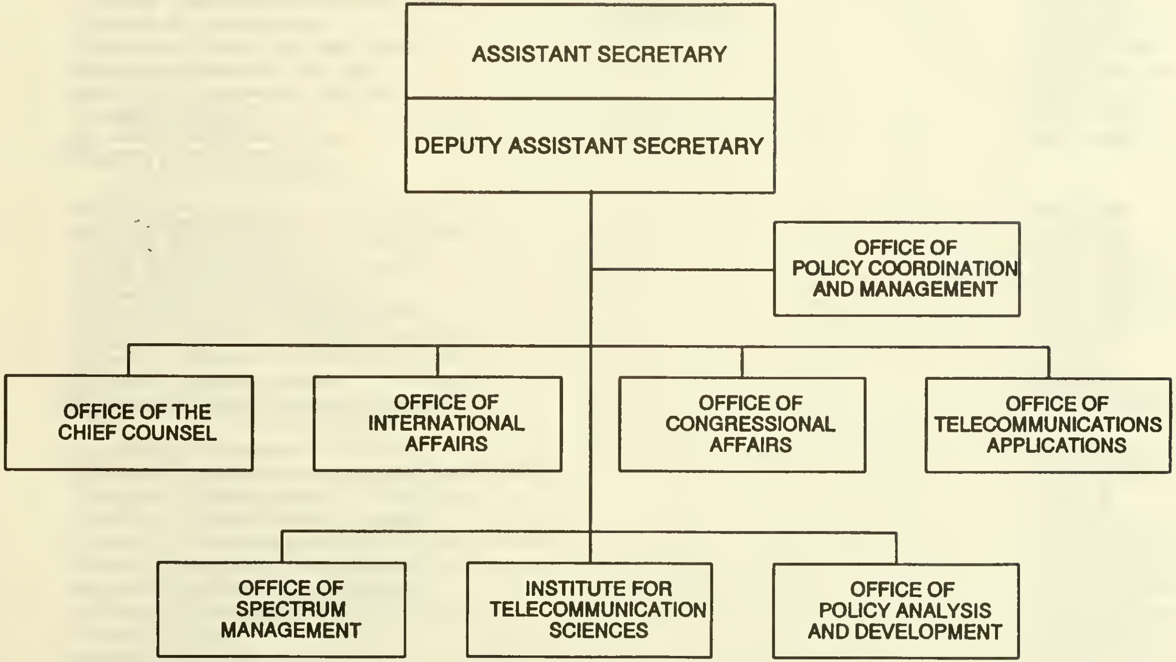
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION


ASSISTANT SECRETARY
DEPUTY ASSISTANT SECRETARY
OFFICE OF POLICY COORDINATION AND MANAGEMENT
OFFICE OF THE CHIEF COUNSEL
OFFICE OF INTERNATIONAL AFFAIRS
OFFICE OF CONGRESSIONAL AFFAIRS
OFFICE OF TELECOMMUNICATIONS APPLICATIONS
OFFICE OF SPECTRUM MANAGEMENT
INSTITUTE FOR TELECOMMUNICATION SCIENCES
OFFICE OF POLICY ANALYSIS AND DEVELOPMENT

DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
Budget Estimates, Fiscal Year 1994

General Statement

Goals of the Program

The National Telecommunications and Information Administration (NTIA) is responsible for the development and presentation of domestic and international telecommunications and information policy for the Executive Branch, for ensuring the efficient and effective use of the Federal radio spectrum, for performing state-of-the-art telecommunications research, engineering, and planning, and for administering the federal program that supports public telecommunications facilities and the National Endowment for Children's Educational Television (NECET). The FY 1994 budget request will support NTIA's primary goals of:

- Promoting increased competition and efficient investment in telecommunications and information industries;
- Advocating international telecommunications policies that will help open international markets and promote the interests of the United States;
- Setting policies for effectively managing the Federal use of the radio spectrum;
- Providing technical research results to government and industry to improve telecommunications system planning, design, and evaluation; and
- Managing the Public Telecommunications Facilities Program and the National Endowment for Children's Educational Television.

Statement of Objectives

NTIA's domestic policy activities require continuing evaluation of the relative importance of current telecommunications and information policy issues to determine those highest priority items that demand immediate Executive Branch attention. The demands of legislative calendars and Federal Communications Commission (FCC) dockets and the availability of existing NTIA resources also influence NTIA domestic policy activities. The range of domestic telecommunications policy issues is broad and increasingly complex, reflecting the rapid technical and economic changes in the telecommunications marketplace.

In the international area, NTIA develops and advocates policies related to regulatory and technical matters that will improve the international competitiveness of the U.S. telecommunications industry and the ability of U.S. businesses and consumers to have access to high-quality, reasonably-priced international services. NTIA will continue the development of international policies that promote effective competition, including a diversity of facilities and services, and open markets for U.S. service providers and equipment suppliers. Telecommunications standards will continue to provide the basis for U.S. equipment manufacturers and service providers to compete in global markets. For FY 1994, NTIA's continuing participation in domestic and international standards-setting fora will strengthen the competitiveness of U.S. telecommunications and information services.

As the manager of Federal radio frequency spectrum, NTIA must ensure that all government needs for vital telecommunications can be satisfied, nationally and internationally, during peacetime and under emergency conditions. In light of technological growth, the advent of satellites, unprecedented demands on the allocation of the spectrum, the need for more rapid communications, and the transfer of large volumes of information, the national and international uses of radio frequency spectrum have increased and are expected to continue to increase dramatically. NTIA must ensure that scarce and valuable spectrum is used efficiently and fairly while promoting innovation and serving users' needs.

Through telecommunications research and engineering, NTIA undertakes studies to keep the United States at the forefront of telecommunications technology and ensure that American firms have the knowledge available to stimulate product development and service provision. NTIA efforts include research directed toward improving the understanding of radio-wave transmission to enhance spectrum utilization and the performance of radio communication systems. Important results of this research are spectrum use concepts and models that lead to more efficient industry and government use of the radio frequency spectrum and electromagnetic wave and propagation models that lead to improvements in radio system performance. NTIA also performs studies directed toward developing domestic and international telecommunications performance standards, assessing the performance of industry and government telecommunications networks, and evaluating new technologies for application of future needs. These activities facilitate competition in the U.S. telecommunications industry, promote international trade opportunities for U.S. telecommunications firms, and improve the cost effectiveness of government telecommunications use.

The Public Telecommunications Facilities, Planning and Construction appropriation supports two program activities: 1) the Public Telecommunications Facilities Program (PTFP), and 2) the Pan-Pacific Educational and Cultural Experiments by Satellite (PEACESAT) Program. In administering PTFP, NTIA undertakes to ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible, that educational entities are able to use a variety of telecommunications technologies to improve the effectiveness of distance learning, that minorities and women have increased access and control of public telecommunications, and that blind and hearing-impaired persons are able to participate more fully in society through the use of telecommunications. NTIA also monitors the over $200 million in grants currently within the 10-year Federal interest period. The PEACESAT program provides educational, medical, and cultural telecommunications services to many Pacific island nations.

NTIA also administers the National Endowment for Children's Educational Television (NECET). NECET awards grants to support the creation and production of television programming specifically directed toward the development of children's fundamental intellectual skills. A ten-member advisory council, composed of individuals with experience in the field of children's television programming, research, and other related fields, has been established to advise the Secretary of Commerce on matters directly related to the administration of NECET.

Summary of Proposed Increases

The telecommunications and information industries are vital to the future of the United States. Through its proposed initiatives, NTIA is in a unique position to influence significantly the ability of U.S. companies to compete in the global marketplace and to enhance the benefits provided by a healthy telecommunications sector. The proposed FY 1994 initiatives, $3 million for Salaries and Expenses and $51 million for Information Infrastructure Grants, are part of the Administration's investment strategy. The investment request is contingent upon enactment of an omnibus reconciliation act that contains the President's deficit reduction package. The following are summaries of the proposed FY 1994 initiatives [1]:

- **National Information Infrastructure** ($51 million, 14 FTE)
- **Critical International Telecommunications Conference Planning and Participation** ($1.4 million, 10 FTE)
- **Telecommunications Infrastructure Research and Development** ($700 thousand, 3 FTE)
- **National Research and Education Network (NREN) Program** ($500 thousand, 3 FTE)
- **Spectrum Reallocation** ($400 thousand, 0 FTE)

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[1] The FTE associated with the Investment increases do not represent additional FTE, but instead are internal tranfers between programs.

- **National Information Infrastructure**

The Administration has proposed the development of a National Information Infrastructure (NII) that can serve the needs of all Americans. A key ingredient to a successful implementation of the NII is to provide educators, health care, and other social service providers with access to the benefits of the NII. Public service entities need to develop the capabilities that will enable them to connect into the NII to take full advantage of increasingly sophisticated telecommunications and information technologies. NTIA funding to assist states, local governments, universities and school systems, and hospitals and other health care providers, is necessary for the establishment of new systems, enhancement of existing telecommunications networks, and interconnection among existing systems. Advanced telecommunications systems will, in turn, help to improve education at all levels, improve the delivery of health care (particularly to rural areas), and allow ordinary citizens greater access to information resources throughout the country.

- **Critical International Telecommunications Conference Planning and Participation**

During the next few years, international telecommunications conferences addressing radio spectrum allocation, standard-setting, and regulatory reform, as well as other international coordination and planning activities, will increase substantially in importance and number. These activities, including world administrative radio conferences (WARCs), bilateral and multilateral negotiations, and standards development, will play a critical role in meeting U.S. national objectives for the use of telecommunications. Well-planned, active participation by the U.S. government, thoroughly coordinated with the private sector, is essential to promoting U.S. global competitiveness in the development of advanced telecommunications technologies and services and the manufacture and sale of telecommunications and related equipment.

- **Telecommunications Infrastructure Research and Development**

Rapid advances in networking technologies will profoundly affect the evolution of the telecommunications infrastructure -- providing the foundation for the information superhighways of the future -- and will have a major impact on U.S. competitiveness in international telecommunications markets. The results of NTIA's efforts to develop performance standards for network planning and operation will facilitate the implementation of efficient, high-capacity communication systems key to sustained U.S. economic growth and global competitiveness.

- **National Research and Education Network (NREN) Program**

NREN is a high-speed data network linking government, industry, and academic research institutions. Several Federal agencies, including NTIA, have been coordinating NREN development since 1991. There are two major reasons for NTIA to become more heavily involved in the NREN. First, telecommunications and information policy issues are beginning to become critical to NREN development. NREN, which is being built on the foundations of the existing Internet national network, is itself evolving from a specialized network for research purposes to an important component of the national telecommunications infrastructure, with extensive commercial use planned. As a result, policy issues dealing with the role of NREN and the overall national telecommunications infrastructure are increasing in importance. Second, as part of the President's National Information Infrastructure (NII) initiative, NTIA will be providing funds for educational institutions, health care providers, and others to interconnect to advanced telecommunications networks. NREN and Internet are examples of the types of networks to which NTIA could be funding interconnection. Increased NTIA participation in NREN planning and development would help make certain that the potential benefits of such interconnection is considered as NREN is designed.

- **Spectrum Reallocation**

Both the Administration and Congress are proposing legislation that would require NTIA to transfer 200 megahertz (Mhz) of Federal spectrum to the FCC for subsequent distribution to the private sector. Under the proposed legislation, the Secretary of Commerce will identify 200 Mhz of Federal spectrum to be transferred (based on extensive analytical engineering and economic feasibility studies conducted by NTIA) in coordination with other Federal agencies. The Secretary is required to provide a number of reports to the President and the Congress. Moreover, NTIA plans to make extensive use of its existing spectrum policy advisory committee in undertaking this effort. NTIA will convene and administer meetings of the advisory committee and special studies from the private sector involving spectrum planning and the 200 Mhz transfer activities.

Summary of Performance and Resources

- Performance

Salaries and Expenses:

Domestic Policies -- NTIA will study major telecommunications issues, file comments with the FCC, develop Administration policy recommendations, make contributions to interagency and interdepartmental policy development, present Administration telecommunications proposals to industry and the public, and participate in telecommunications industry conferences.

International Policies -- NTIA will continue to provide leadership in developing policies and representing U.S. interests at international meetings.

Spectrum Plans and Policies -- NTIA will participate in domestic and international radiocommunication fora to help ensure the efficient, effective, and equitable distribution of the spectrum.

Spectrum Management, Analysis, and Operations -- NTIA will process frequency assignment requests, complete systems reviews, and perform in-depth analysis of spectrum use to ensure efficient and effective use of the spectrum.

Spectrum Research and Analysis -- NTIA will conduct spectrum analysis studies of the characteristics of radio wave transmission to enhance spectrum utilization and the performance of radiocommunication systems.

Systems and Networks Research and Analysis -- NTIA will evaluate specific performance parameters and operational characteristics of selected government and private sector telecommunications networks.

Public Telecommunications Facilities, Planning and Construction:

Public Telecommunications Facilities Program -- NTIA will continue to fund grants to support the extension of public broadcast signals to unserved areas, expand the variety and reach of telecommunications services and facilities serving educational needs, increase the number of public telecommunications services and facilities available, operated, and owned by minorities and women, and enhance the participation in society of blind and hearing-impaired citizens through telecommunications.

Endowment for Children's Television:

National Endowment for Children's Educational Television -- NTIA will fund grants to increase the pool of programs available to children 16 years and under to improve fundamental intellectual skills.

- Resources (dollar amounts in thousands)

	1993 Appropriation		1994 Estimate		Increase/Decrease	
	Perm Pos.	Amount	Perm. Pos.	Amount	Pos.	Amount
Salaries and Expenses	195	$17,900	217	$21,927	+22	+$4,027
Public Telecommunications Facilities, Planning and Construction	45	$21,320	15	$20,636	-30	-$684
Endowment for Children's Educational Television	1	$1,000	1	$1,000	0	$0
Information Infrastructure Grants	0	$ 0	14	$51,000	+14	+$51,000
Total, NTIA	241	$40,220	247	$94,563	+6	+$54,343

Exhibit 5

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(DOLLAR AMOUNTS IN THOUSANDS)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget	195	19,566	203	19,902
	less: Dec 17, 1992 Proposed Transfers not approved (allowed by P.L. 102–395)		(1,073)		(1,073)
	Amount currently available, 1993	195	18,493	203	18,829
	Less: transfers per P.L. 102–395 subsequently implemented		(593)		(593)
	Appropriation, 1993	195	17,900	203	18,236
	less: Obligations from prior years				(336)
	plus: 1994 Adjustments to base		1,027		1,027
	1994 base	195	18,927	203	18,927
	plus: 1994 investments	22	3,000	16	3,000
	1994 estimate	217	21,927	219	21,927

	Comparison by activity/subactivity, with subtotals by activity		1992 Actual Personnel	1992 Actual Amount	1993 Currently Available Personnel	1993 Currently Available Amount	1994 Base Personnel	1994 Base Amount	1994 Estimate Personnel	1994 Estimate Amount	Increase/(Decrease) Personnel	Increase/(Decrease) Amount
NTIA–17	Domestic and International policies:											
	(a) Domestic policies......	Pos/BA	13	1,754	13	1,815	13	1,897	15	2,197	2	300
		FTE/Obl.	16	1,627	14	1,910	14	1,897	16	2,197	2	300
	(b) International policies..............	Pos/BA	14	1,776	14	1,925	14	2,052	21	2,702	7	650
		FTE/Obl.	21	1,966	16	1,935	16	2,052	21	2,702	5	650
	Subtotal..................	Pos/BA	27	3,530	27	3,740	27	3,949	36	4,899	9	950
		FTE/Obl.	37	3,593	30	3,845	30	3,949	37	4,899	7	950
NTIA–37	Spectrum management:											
	Spectrum plans and policies................	Pos/BA	22	2,080	22	2,211	22	2,220	26	3,095	4	875
		FTE/Obl.	18	2,064	23	2,237	23	2,220	26	3,095	3	875
	Spectrum management, analysis and operations..............	Pos/BA	109	8,443	109	8,901	109	8,983	109	8,983	0	0
		FTE/Obl.	91	8,337	110	8,926	110	8,983	110	8,983	0	(0)
	Subtotal..................	Pos/BA	131	10,523	131	11,112	131	11,203	135	12,078	4	875
		FTE/Obl.	109	10,401	133	11,163	133	11,203	136	12,078	3	875

Comparison by activity/subactivity, with subtotals by activity		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA–50 Telecommunication sciences research:											
Spectrum research and analysis............	Pos/BA	19	1,704	19	1,749	19	1,815	22	2,153	3	338
	FTE/Obl.	33	1,874	22	1,749	22	1,815	24	2,153	2	338
Systems and networks research and analysis............	Pos/BA	18	1,843	18	1,892	18	1,960	24	2,797	6	837
	FTE/Obl.	21	1,591	18	2,072	18	1,960	22	2,797	4	837
Subtotal..................	Pos/BA	37	3,547	37	3,641	37	3,775	46	4,950	9	1,175
	FTE/Obl.	54	3,465	40	3,821	40	3,775	46	4,950	6	1,175
Direct Obligations	Pos/BA	195	17,600	195	18,493	195	18,927	217	21,927	22	3,000
	FTE/Obl.	200	17,459	203	18,829	203	18,927	219	21,927	16	3,000
Adjustments for:											
Recoveries											
Unobligated balance, start of year			(195)		(336)						
Unobligated balance transfered											
Unobligated balance, end of year			336								
Unobligated balance expiring											
Financing from transfers:											
Transfers from other accounts	Pos/BA	0	0	0	(593)	0	0	0	0	0	0
Transfers to other accounts	Pos/BA	0	0	0	0	0	0	0	0	0	0
Appropriation	Pos/BA	195	17,600	195	17,900	195	18,927	217	21,927	22	3,000

Exhibit 7

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF FINANCING
(DOLLAR AMOUNTS IN THOUSANDS)

	1992 Actual Amount	1993 Currently Available Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) Amount
Total Obligations	25,662	27,629	27,727	30,727	3,000
Financing:					
Offsetting collections from:					
Federal funds	(7,991)	(8,550)	(8,550)	(8,550)	0
Non–Federal sources 1/	(212)	(250)	(250)	(250)	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	(195)	(336)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	336	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	17,600	18,493	18,927	21,927	3,000
Financing:					
Transfer to other accounts	0	0	0	0	0
Transfer from other accounts	0	(593)	0	0	0
Appropriation	17,600	17,900	18,927	21,927	3,000

1/ Non–Federal users of the Telecommunications Analysis (T.A.) Services program.

Exhibit 8

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Permanent Positions	FTE	Amount
Other Changes:			
1993 Pay Raise			
Within-grade step increases	0	0	130
Civil Service Retirement System (CSRS)	0	0	109
Federal Employees Retirement System (FERS)	0	0	(23)
Thrift Savings Plan	0	0	43
Federal Insurance Contribution Act (FICA) – OASDI	0	0	7
Health Insurance	0	0	38
Travel	0	0	49
Per Diem			
Rental payments to GSA	0	0	15
Communications, utilities, and miscellaneous charges	0	0	46
Other telephone			
Printing and reproduction	0	0	12
Other Services:	0	0	8
Working Capital Fund			
Other Services	0	0	(12)
Supplies and materials	0	0	11
Employees Compensation Fund	0	0	6
Continuation of 1993 operating level	0	0	(5)
Subtotal, other changes	0	0	593
	0	0	1,027
Total adjustments to base	0	0	1,027

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
Justification of Adjustments to Base
(Dollar amounts in thousands)

Other Changes:		FTE	Amount
1993 pay raise		0	130
Full year cost of 1993 pay increase and related costs. A pay raise of 3.7% to be effective January 1, 1993.			
Total cost in 1994 of 1993 pay increase	$520,000		
Less amount funded in FY 1993	-390,000		
Less amount absorbed	0		
Amount requested in FY 1994 to provide full-year cost of 1993 pay increase	130,000		
Within-grade step increases		0	109
An increase of $108,606 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.			
Estimated number of within-grade step increases	188		
Step increases not earned due to turnover (12.7% x 188)	24		
Average step above step 1 per separation	5		
Average cost per within-grade step increase	$ 1,384		
Gross cost of scheduled step increases ($1,384 x 188)	260,192		
Less savings due to separations ($1,384 x 24 x 5)	-166,080		
Subtotal personnel compensation	$ 94,112		
Benefits	+ 14,494		
Total adjustment-to-base	$108,606		
Civil Service Retirement System (CSRS)		0	(23)

The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 56.0% in 1993 to 52.5% in 1994 for regular employees. Contribution rates will remain the same.

Payroll subject to retirement systems ($9,504,000)

Basic benefit cost in 1994 ($9,504,000 x .525 x .07)	349,272		
Basic benefit cost in 1993 ($9,504,000 x .560 x .07)	372,557		
Total adjustment-to-base	- 23,285		
Federal Employees' Retirement System		0	43

The number of employees covered by FERS continues to rise as employees covered by the CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 44.0% in 1993 to 47.5% in 1994. The contribution rate will remain the same.

Payroll subject to retirement systems ($9,504,000)			
Basic benefit cost in 1994 $9,504,000 x .475 x .1290	582,358		
Basic benefit cost in 1993 $9,504,000 x .440 x .1290	539,447		
Total adjustment-to-base	42,911		
Thrift Savings Plan (TSP)		0	7

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2.0 %.

Payroll subject to retirement systems ($9,504,000)			
Thrift Savings Plan in 1994 $9,504,000 x .475 x .02	90,288		
Thrift Savings Plan in 1993 $9,504,000 x .440 x .02	83,635		
Total adjustment-to-base	6,653		
Federal Insurance Contributions Act (FICA)		0	38

As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in FY 1993 to $60,150 in FY 1994. The OASDI tax rate will remain 6.20% in FY 1994.

OASDI:

FERS payroll subject to FICA tax in 1994 $9,504,000 x .475 x .95 x .062	265,898
FERS payroll subject to FICA tax in 1993 $9,504,000 x .440 x .884 x .062	229,194
Increase (1994 - 1993)	36,704
Other payroll subject to FICA tax in 1994 $335,000 x .95 x .062	19,732
Other payroll subject to FICA tax in 1993 $335,000 x .884 x .062	18,361

Increase (1994 - 1993) 1,371
Total adjustment-to-base 38,075

Health Insurance 0 49

Effective January 1992, NTIA's contribution to Federal employee's health insurance premiums increased by 8.1%. Applied against the 1993 estimate of $603,000, the additional amount required is $48,843.

Employees' Compensation Fund 0 (5)

The Employees' Compensation Fund bill for the year ending June 30, 1992 is $5,000 lower than the bill for the year ending June 30, 1991. The charges will be reimbursed to the Department of Labor, Employees' Compensation Fund, pursuant to 5 U.S.C. 8147.

Per Diem Increase 0 15

Effective January 1992, the General Services Administration raised per diem rates. This increase resulted in a 7.4% increase to NTIA. This percentage was applied to NTIA's 1993 estimate of $196,000 to arrive at an increase of $14,504.

Rent, Payments to GSA 0 46

GSA rates are projected to increase 3.0% in 1994. This percentage was applied to the 1993 estimate of $1,537,000 to arrive at an increase of $46,110.

GPO Printing 0 8

The Government Printing Office (GPO) has provided an estimated rate increase of 3.7%. This percentage was applied to the 1993 estimate of $209,000 to arrive at an increase of $7,733.

Communications, Utilities and Other Rent 0 12

The Washington Interagency Telecommunication System (WITS) telephone conversion will be installed in the Department, converting the Centex switch to GSA/WITS switch. The estimated increase in operating cost is $12,000 due to GSA imposed line charges in the Hoover building.

Working Capital Fund 0 (12)

A decrease of $12,000 was required for the Departmental Working Capital Fund due to the redistribution of the cost of OGC Operations.

Other Services	0	11

Cross Services:

Based on estimates provided and historical figures, an increase of $11,039 is required for charges in FY 1993 and FY 1994 for cross-services provided by the National Institute of Standards and Technology (NIST) to the NTIA facility in Boulder, Colorado. The calculation is as follows:

NIST Cross Services Charges FY 1993	471,746
Estimated increase FY 1994 (Approximately 7.8%)	36,796
NIST Cross Services Charges Estimate for FY 1994	508,542
Increase (FY 1994 - FY 1993)	36,796
Amount associated with other agency projects (70%)	- 25,757
Additional amount required for direct projects (30%)	11,039

Supplies and Materials	0	6

Based on the GNP deflator of 2.4%, the cost of supplies and materials is expected to increase by $5,859.

Continuation of 1993 Operating Level	0	593

In order to continue the 1993 operating level as approved by Congress, $593,000 is required.

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Domestic and international policies:											
(a) Domestic policies......	Pos/BA	13	1,754	13	1,815	13	1,897	15	2,197	2	300
	FTE/Obl.	16	1,627	14	1,910	14	1,897	16	2,197	2	300
(b) International policies..............	Pos/BA	14	1,776	14	1,925	14	2,052	21	2,702	7	650
	FTE/Obl.	21	1,966	16	1,935	16	2,052	21	2,702	5	650
Direct Obligations.........	Pos/BA	27	3,530	27	3,740	27	3,949	36	4,899	9	950
	FTE/Obl.	37	3,593	30	3,845	30	3,949	37	4,899	7	950

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: **Domestic and International Policies**
Subactivity: **Domestic Policies**

Goal Statement

The primary goal of NTIA's domestic policy subactivity is to improve the way in which service and products are provided to the public by the U.S. telecommunications and information industries. In addition, NTIA's domestic policy program seeks to encourage minority ownership of telecommunications businesses.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

Base Program

The domestic policy subactivity develops policies that will improve services and equipment provided to the public by the U.S. telecommunications industry. The Communications Act of 1934 and its amendments provide a basis for the regulation of the telecommunication industry in order to serve the public interest. However, existing law, regulation, and administrative procedures are subject to enormous pressures created by rapid changes in technology and increased demand for advanced services and equipment. NTIA is unique in its mandate within the Federal government as the Executive Branch agency principally responsible for developing telecommunications and information policies and recommending these policies to the Congress and the Federal Communications Commission (FCC).

NTIA undertakes policy studies that recommend future courses of action that affect the telecommunication industry; it makes recommendations to Congress as to revisions in telecommunications law; and it participates in proceedings conducted by the FCC.

These numerous external institutions affect NTIA's domestic policy formulation process. NTIA's domestic policy activities require it to evaluate constantly the relative importance of current telecommunications and information policy issues to determine those that require Executive Branch attention. In all cases, NTIA carefully considers which policy issues are of such importance that NTIA should address them by filing pleadings, preparing reports, or submitting testimony.

- Explanation and Justification

NTIA's domestic policy recommendations have made substantial contributions to major procompetitive governmental actions regarding broadcasting, cable, and telephone issues. For example, NTIA recommendations to reform telephone regulations and to remove or replace unnecessary or outmoded regulations applicable to the mass media industry have had major impacts on recent telecommunications policy decisions by the FCC and debates in Congress. The range of domestic telecommunications policy issues is broad and increasingly complex, reflecting the rapid changes in telecommunications technology, its application to the marketplace, and a broadening of the number and types of players.

The common carrier industry is one major focus of NTIA's efforts. NTIA supports the universal availability of basic common carrier services. It also advocates policies and proposals that promote the efficient provision of telecommunication services and the reduction of competitive barriers. When the Communications Act of 1934 was written, it was difficult to anticipate that technological advances would have such significant effects on the competitive environment of the industry. In addition, because communications, computer, and information technologies are converging, regulatory questions such as who should provide what services and under what conditions are increasingly complex and difficult. NTIA fulfills its role in this area by 1) working with the Congress and the FCC in structuring a competitive environment for new and innovative telecommunications services; and 2) ensuring that the Government does not create regulatory barriers that burden the provider or receiver of these services.

In FY 1993, NTIA will work with the FCC and the states to remove impediments to local exchange competition and barriers to the provision of video services by telephone companies. NTIA will study and make policy recommendations regarding the development of personal communications services (PCS), which is a new mobile communications technology. More generally, NTIA will advocate the establishment of a market-based spectrum management policy, through the use of competitive bidding for the assignment of spectrum.

In FY 1994, NTIA will participate in relevant Congressional action, interagency and FCC proceedings to advocate greater competition between cable companies and telephone companies in order to provide lower prices and better services to consumers. NTIA will also focus on other developing events in the domestic common carrier industry, including reform of FCC regulation of local and long distance telephone companies.

The major benefit of NTIA's work in this area will be to help reduce unnecessary regulation and encourage policies and actions that increase the availability and diversity of services in telecommunications.

In FY 1993, NTIA will examine policies that affect the ability of U.S. broadcasters and cable operators to compete internationally. As such, it will continue to pursue opportunities to reform unnecessary or outmoded regulation of existing and emerging mass media services, such as advanced television (ATV) and digital audio broadcasting (DAB). In FY 1993, the FCC may choose a terrestrial broadcast standard for ATV. NTIA will continue to participate in the FCC's Advisory Committee on Advanced Television Service. Important issues arising from the FCC's choice of a standard will remain. NTIA will also monitor the FCC's implementation of the cable legislation enacted in 1992.

NTIA will seek ways to enhance minority participation in telecommunications. Specific efforts that will continue include: (1) directing ComTrain, a training program to assist new minority commercial broadcast owners; (2) disseminating information and conducting seminars on ownership opportunities in telecommunications; (3) developing and commenting on legislative and regulatory proposals that promote minority ownership in telecommunications; (4) working with industry, and other government agencies on initiatives to increase public/private sector assistance to minorities interested in ownership of telecommunications businesses and services; and (5) developing TELECAP, a study of capital development strategies for minority investment in telecommunications.

- Statement of Operating Objectives

Through its base program in domestic policies, NTIA will formulate and advocate specific legislative, regulatory, technical, strategic, and institutional plans and policies to the President, within the Executive Branch and before the Congress, the FCC, and relevant industries and organizations. Specifically, NTIA's domestic policy objectives are to promote: the development of existing and emerging information distribution systems; universal availability of basic telephone service at affordable rates; increased minority ownership and operation of telecommunications facilities; deployment of advanced technologies in the U.S. telecommunications industry; and development of incentives for diverse telecommunications and information services and distribution mechanisms while protecting data security and privacy.

- Measures of Performance

NTIA's domestic policy office serves a variety of "internal" and "external" customers for which performance should be assessed. Some statistical measures, such as number of pages produced, number of citations in industry literature and the number of speaking invitations received, are relatively simple to administer. While recognizing their limitations, OPAD continues to use these measures. Comprehensive evaluation of NTIA's domestic policy outputs requires functional measures that would permit comprehensive evaluation of policy development. Such measures should address the quality of team and individual efforts.

OPAD continues to seek an appropriate overall measure of performance. A customer survey conducted in FY 1992 was a useful qualitative assessment of OPAD products and services. In FY 1994, OPAD will conduct another customer survey. OPAD will also formalize its current practice of sharing report findings with outside experts prior to publication and initiate review panels comprising customers and peers to conduct a qualitative assessment of specific OPAD products and to solicit views on OPAD's activities.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase	
	FTE	Amount	FTE	Amount	FTE	Amount
Domestic Policies	14	$1,897	16	$2,197	+2	+$300
Systems & Networks Research & Analysis	18	$1,960	19	$2,160	+1	+$200

National Research and Education Network (NREN) Program (+3 FTE, +$500) This initiative increases NTIA's involvement in policy and standards planning for the National Research and Education Network (NREN). NREN is a high-speed data network linking government, industry, and academic research institutions. Several Federal agencies, including NTIA, have been involved in the coordination of NREN development since 1991. There are two major reasons for NTIA to become more heavily involved in the NREN. First, telecommunications and information policy issues are beginning to become critical to NREN development. NREN, which is being built on the foundations of the existing Internet national network, is itself evolving from a specialized network for research purposes to an important component of the national telecommunications infrastructure, with extensive commercial use planned. As a result, policy issues dealing with the role of NREN and the infrastructure are increasing in importance. Second, as part of the President's National Information Infrastructure (NII) initiative, NTIA will be providing funds for educational institutions, health care providers, and others to connect to advanced telecommunications networks. NREN and Internet are examples of the types of networks to which NTIA could be funding such interconnections. Increased NTIA participation in NREN development would help make certain that the potential benefits of interconnection for schools, hospitals, and other health care providers, are considered as NREN is designed.

- Program Change Explanation and Justification

Through its role on the Policy Working Group (PWG) of the Federal Networking Council (FNC), NTIA is providing limited support as part of its FY 1993 base program for the analysis of policy and standards issues affecting NREN. Issues such as intellectual property, communications security, and privacy are likely to have profound effects on the development of the NREN in the near future and on network evolution in general. In this initiative, NTIA proposes to increase involvement in NREN planning and implementation beyond the current base program in order to increase its focus on the telecommunications policy and technical aspects of NREN. As a high-speed network linking supercomputers, the evolution and use of NREN will be a major part of the development of the nation's information infrastructure. NTIA plans to address the following important issues not currently being covered in depth:

Will the NREN, with its huge capacity and advanced fiber optic facilities, duplicate development of advanced networks by privately-owned long distance and local telephone companies? If commercial services are allowed on the network, how should concerns about cross-subsidy and discrimination be addressed so that no commercial provider has an unfair advantage in its use of the network?

How will NREN evolution affect the national information infrastructure? To what degree would NREN compete with other advanced network providers?

How will the operation of NREN affect the future development of advanced services to residential and small business customers? In the past, investments in such publicly funded networks have led to commercial services. For example, ARPANET, one of the first scientific networks, pioneered the data transmission technique known as packet switching, which is now regularly used in private sector data networks throughout the nation and, indeed, the world.

What regulatory and legal barriers are inhibiting the participation of various private sector players in the telecommunication industry in NREN development?

How will the deployment of the network, which initially will not cover the entire United States, affect economic development in the regions that it serves? Although the purpose of NREN is to improve scientific communications, investments made in gigabit networks at this time have great potential benefit for the U.S. private sector's future broadband networks.

What processes have to be put in place to assure that the technical advances following from the NREN program are made available to the entire telecommunications industry?

How will privacy of users be protected as use increases?

This initiative would require that NTIA coordinate with other federal agencies, including Commerce sister agencies NIST and NOAA, for the most part through its participation in the FNC. Given NIST's role in supporting, coordinating and promoting the development of standards within the federal government to provide interoperability and common user interfaces to systems, NTIA's scientific laboratory, the Institute for Telecommunication Sciences (ITS), and NIST would be expected to coordinate activities quite closely. In particular, ITS will contribute to the planning and research and development of quality of service measurements on NREN services as they come online and the enhancement of management functions for the public switched network.

Exhibit 14

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Domestic and International Policies
Telecommunication Sciences Research
Subactivity: Domestic Policies
Systems & Networks Research & Analysis
Program Change: Investment Program: National Research and Education Network (NREN) Program

Personnel Title:		Grade	Number	Annual Salary	Total Salaries
Telecommunications Policy Specialist		15	1	66,609	66,609
Electronics Engineer		14	1	56,627	56,627
Electronics Engineer		12	1	40,298	40,298
Economist		11	1	33,623	33,623
Subtotal			4		197,157
Less lapse	25.00%		(1)		(49,289)
Total full-time permanent			3		147,868
1994 Pay Adjustment					0
					147,868

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	0
Total	3
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	0
Total	4

Exhibit 15

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Domestic and International Policies
Telecommunication Sciences Research
Subactivity: Domestic Policies
Systems & Networks Research & Analysis
Program change: Investment Program: National Research and Education Network (NREN) Program

Object Class	1994 Increase/ (Decrease)
11 Personnel compensation	
11.1 Full–time permanent	148
11.3 Other than full–time permanent	
11.5 Other personnel compensation	
11.9 Total personnel compensation	148
12.1 Civilian personnel Benefits	44
21 Travel and transportation of persons	40
22 Transportation of things	2
23.1 Rental payments to GSA	13
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	5
24 Printing and reproduction	9
25 Other services	176
26 Supplies and materials	16
31 Equipment	47
99 Direct obligations	500

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Domestic and International Policies
Subactivity: International Policies

Goal Statement

The Office of International Affairs (OIA) develops and recommends policy alternatives in the formulation of Executive Branch positions on major international telecommunications and information matters. The division develops and recommends U.S. policies that will promote better market access for U.S. telecommunications products and services in foreign countries; participates in negotiations with foreign countries regarding telecommunications policies that affect the competitiveness of U.S. telecommunications and services providers; and formulates and advocates U.S. policies regarding foreign and international telecommunications activities.

The goal of this subactivity is to formulate and implement telecommunications policies that enhance the international competitiveness of U.S. telecommunications and services providers. Policy objectives are based on the identification and interdisciplinary analysis of economic, technological, regulatory, legal, social, and foreign policy issues.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

Base Program

This subactivity develops policies to improve the international competitiveness of the U.S. telecommunications industry. Through promotion of more widespread competition, telecommunications equipment and services can be made available in U.S. and foreign markets at more reasonable cost, with a favorable impact on the U.S. balance of trade.

As the President's principal advisor on domestic and international telecommunication policies, NTIA oversees the development and implementation of the U.S. government's national and international policy on virtually the entire range of private commercial and governmental electronic telecommunications. The Office of International Affairs formulates recommendations on U.S. domestic regulation of international telecommunications services for presentation to the Federal Communications Commission and others; coordinates Federal Government preparatory activity for international conferences and negotiations related to international radio spectrum utilization and telecommunications standards activities; and advises the Department of State on international communications policy. In addition, the Office of International Affairs supports the trade negotiation activities of the United States Trade Representative (USTR) by providing expert staff to represent U.S. telecommunications interests in those negotiations.

- Explanation and Justification

The Secretary of Commerce is charged by The Telecommunications Authorization Act of 1992 (Public Law 102-538) with developing and setting forth plans, policies and programs that relate to international telecommunications issues, conferences, and negotiations. The Secretary is also responsible for coordinating economic, technical, operational and related preparations for U.S. participation in international telecommunications conferences and negotiations.

Public Law 102-538 provides NTIA a mandate to monitor telecommunications oversight for Executive Branch activities in international organizations such as the International Telecommunication Union (ITU), the Organization of American States Conference on Telecommunications (CITEL), the Organization for Economic Cooperation and Development (OECD), the Asia-Pacific Economic Cooperation Conference (APEC), the Pacific Telecommunications Council (PTC), the Caribbean Telecommunications Council (CTC), the Caribbean/Central American Action (C/CAA), the International Telecommunications Satellite Organization (Intelsat), and the International Maritime Satellite Organization (Inmarsat).

As the President's principal advisor on telecommunications and information policy, NTIA actively participates in bilateral and multilateral discussions to advance U.S. interests in the global arena. NTIA works to promote the diversity of cost-based facilities and services and effective competition and trade through deregulation, the reduction of trade barriers, and procompetitive policies.

The Telecommunications Trade Act of 1988 outlines U.S. policy goals for international telecommunications trade. NTIA assists in implementing the Telecommunications Trade Act, through coordination with the International Trade Administration, USTR and other Government agencies by actively participating in telecommunications talks focusing on select foreign countries in Europe, Asia, and Latin America with significant market opportunities for U.S. providers of telecommunications goods and services. Within the telecommunications community, NTIA is recognized for its unique capability to blend domestic and international telecommunications considerations with sound, innovative technological approaches and expertise.

By statute, the President is charged with overseeing Comsat's participation in Intelsat (Comsat is the U.S. signatory to Intelsat). This responsibility, in large measure, has been delegated to the Department of Commerce by Public Law 102-538. The Department is also charged by statute with overseeing Comsat's participation in the Inmarsat. To carry out these responsibilities, NTIA attends key decision-making meetings, analyzes all Intelsat and Inmarsat documents proposed in advance of action items, develops and presents NTIA's views, and works with senior level representatives of the FCC and the Department of State to formulate and present to Comsat appropriate instructions on particular agenda items that affect U.S. interests.

NTIA works very closely with representatives from the private sector, seeking their advice and counsel to ensure that their concerns are heard in all matters relating to telecommunications policies affecting trade, services, and procurement. Because of the nature of the telecommunications regulatory environment in the United States, NTIA/OIA coordinates its activities very closely with the Department of State and the Federal Communications Commission. Each of the three entities -- NTIA, DOS, FCC -- has specific responsibilities that are defined by laws and executive orders. Coordination is a continual process to ensure that in all international telecommunications deliberations and negotiations, the interests of the U.S. telecommunications industry, and the U.S. Government are best served.

- Statement of Operating Objectives

NTIA's objectives in these activities are derived from the unique features and regulatory issues characterizing the international telecommunications industry. NTIA's Office of International Affairs possesses expertise in five essential areas: 1) technical skill and expertise; 2) an understanding of the U.S. domestic telecommunications environment, products, services, and regulatory policies; 3) an understanding of U.S. trade objectives; 4) an understanding of the international telecommunications regulatory environment and market; and 5) an understanding of the contributions that telecommunications makes to overall economic growth of emerging nations and the related opportunities to increase the competitiveness of U.S. telecommunications firms. With this expertise, NTIA develops policy recommendations aimed at improving the competitiveness of U.S. services. NTIA participates in and advocates our national policies before international organizations and in bilateral and multilateral consultations and negotiations.

The objectives for this period can be grouped under topical areas that reflect both the growing importance of telecommunications and information services as a major component of the U.S. trade posture and the rapid advances in technology that are driving telecommunications changes. These objectives are:

1. To provide a forum within the Executive Branch for broad discussion and analysis of U.S. regulation of international telecommunications services and of the impact on U.S. suppliers of the uneven pattern of liberalization that has emerged internationally.

2. To provide strong leadership to achieve U.S. telecommunications objectives in international regulatory fora, particularly the ITU.

3. To support initiatives to establish competitive, deregulatory telecommunications policies in Latin America, Eastern Europe and the Newly Independent States (NIS).

4. To ensure that the telecommunications standards setting processes do not create de facto trade barriers.

5. To prepare for, and to provide U.S. representation in negotiations and consultations that reduce obstacles to the growth of the U.S. telecommunications & information industries.

6. To provide policy guidance to U.S. interests in satellite and overseas facility operations.

NTIA's role as Executive Branch spokesperson to the FCC will continue to be emphasized, with expanded concern for those proceedings that relate to international issues. On January 15, 1993, NTIA/OIA issued through the Federal Register a broad Notice of Inquiry (NOI) on U.S. Regulation of International Telecommunications Services. That NOI seeks comment inter alia on existing regulation of services by the FCC; possible inconsistency between U.S. regulatory vs. trade negotiation objectives; and on the factual context (e.g., U.S. and foreign owned carriers' activities abroad, foreign market and regulatory characteristics). Priority will be given to analyzing the comments received to the NOI and to preparing a report summarizing NTIA's policy conclusions.

Due to the rapid application of new technologies and deregulation, international telecommunications issues are growing in complexity. New technologies create opportunities for providing services and equipment on a competitive basis, thereby challenging traditional monopoly concepts and practices. The ITU plays an instrumental role through its multilateral international conference in establishing international regulations for radio spectrum use and in connection with telecommunications standards matters. In FY 1992, NTIA played a leading role in the preparations and negotiations for the World Administrative Radio Conference (WARC) dealing with major spectrum reallocation issues. In FY 1993, NTIA will be responsible for implementing decisions taken at the WARC insofar as they effect federal spectrum use. In December 1992, NTIA played a leading role at the ITU's additional plenipotentiary conference at which it was agreed to restructure the ITU into three sectors (radiocommunications, standardization and telecommunications development), each of which will hold important international conferences in FY 1993 - FY 1994. Major effort by NTIA will be required to adapt its operations to the new organization and to prepare for these specific events.

Telecommunications standards will continue to provide the basis for U.S. equipment manufacturers and service providers to compete in global markets. It is assumed that international infrastructure development and improvement will comprise a major component of the overall U.S. foreign policy to ensure global economic growth. NTIA will develop positions in the ITU and other fora that are concerned with telecommunications standard-setting actions. NTIA will follow closely and participate in the activities of the European Technical Standards Institute (ETSI) and the Japanese standards organization, Telecommunication Technical Committee (TTC), as well as the U.S. T1 committee with the overriding objective of ensuring wider market opportunities for U.S. industry. NTIA will seek to involve our Latin American neighbors, particularly Mexico, in the activities of the T1 Committee. The promotion of U.S. telecommunications equipment and services competition faces continuing and, in many cases, more sophisticated resistance and technical challenges by our trading partners. Intensified efforts by nations to erect or sustain non-tariff barriers must be confronted and reversed.

Characteristic of the dynamic changes at work in the telecommunications industry is the increased emphasis placed on telecommunication trade. NTIA applies its in-depth telecommunications expertise in supporting market access opportunities sought by American industry and the U.S. trade community. NTIA continues to hold meetings with business users of international telecommunications and trade associations to identify international telecommunications problems confronting the U.S. business community. When Government assistance is needed and justified, NTIA assumes leadership for remedial action which may include inter- and intra-agency efforts, discussions with foreign administrations, technical assistance, and policy development.

In FY 1993 and FY 1994, NTIA will participate in telecommunication services negotiations/discussions in support of USTR activities. Through FY 1992 and FY 1993, negotiations for a North American Free Trade Agreement were a major focus of NTIA's trade-support effort. The agreement was signed by the President on January 17, 1993 and is expected to be presented to Congress later in FY 1993. Deliberations with the EC bilaterally and within the GATT context will continue throughout FY 1993 to ensure that fair competitive practices for telecommunications services and equipment become the norm as EC92 becomes a *fait accompli*. In FY 1993, as EC practices become apparent, NTIA will continue to monitor Community telecommunications activities. This will involve close monitoring and analysis of EC member state actions to implement EC telecommunications directives. This activity requires on-going research identifying trends in the international economic and regulatory environment, liaison with U.S. industry groups in the United States and overseas, the preparation of position papers and policy recommendations, and regular participation in interagency and intergovernmental meetings on international telecommunications and information issues.

NTIA programs to improve telecommunications infrastructure development in Latin America, Eastern Europe and the NIS vary depending upon host-government needs and available U.S. Government resources. In general, however, these programs are designed to familiarize foreign telecommunications managers and policy-makers with the latest technologies and management techniques in a policy context encouraging competition and deregulation.

Because a sound telecommunications infrastructure is essential to economic growth, political stability and liberalization, and to social enhancement, NTIA will continue its activities to develop appropriate policies, laws and regulations in the Eastern European telecommunications sector and expects to design similar assistance in the Newly Independent States (NIS). NTIA will also maintain its spectrum management technical cooperation programs providing Eastern European managers greater opportunity to utilize current spectrum-based technologies and the latest techniques in spectrum management practices. NTIA telecommunications infrastructure development programs are funded through State Department and USAID which affects policy planning, flexibility and responsiveness.

NTIA will continue to monitor other government's satellite telecommunications policies to ensure the continued competitiveness of U.S. equipment and service providers. NTIA will continue to monitor and evaluate the rapid evolution of satellite communications technology and barriers to fair competition, and will represent U.S. interests in a variety of multilateral and bilateral fora.

- Measures of Performance:

NTIA/OIA will continue to provide leadership in developing position papers and representing U.S. interests in multilateral and bilateral talks in which barriers to trade in telecommunications services and equipment issues are addressed. Potential foreign markets will continue to be studied to identify sales opportunities and trade barriers for U.S. telecommunications exports. The U.S. Government will conduct negotiations to resolve these barriers. NTIA's experience in technical assistance and telecommunications policy development and liaison activities, positions NTIA to play a significant role in these consultations and negotiations. NTIA will continue its efforts to act as a catalyst within the Government to identify non-tariff barriers and to formulate Government actions necessary to eliminate such barriers. This strategy is necessary to maintain the competitiveness of U.S. industry and to ensure that U.S. firms have mutually advantageous market opportunities in foreign markets.

Because U.S. telecommunications policy and regulatory issues are becoming more and more intertwined with technology advances, NTIA will assure close coordination between activities that are regulatory oriented and those that address technical issues within the ITU. These activities have a direct impact on the United States in terms of trade, economic, political and domestic and international regulatory issues.

NTIA will continue to be actively involved in all aspects of the work of the ITU, providing expert technical and policy guidance at meetings of specific study groups established for the radiocommunications and standardization sectors (formerly the International Radio Consultative Committee (CCIR) and International Telegraph and Telephone Consultative Committee (CCITT) Study Groups and Working Parties). Along with the NTIA's Office of Spectrum Management and the Institute for Telecommunication Sciences, the Office of International Affairs will participate in, and lead discussions in, these meetings and will report on the major accomplishments.

NTIA will continue to participate in the annual sessions of the ITU Administrative Council, which establishes and oversees the expenditure of funds, personnel resources, technical cooperation and other management aspects of the ITU. NTIA will participate in activities associated with the ITU review of international spectrum allocation matters and the international regulatory regime. Finally, in FY 1993 and FY 1994, NTIA will serve in significant roles on the U.S. delegation at the first world conferences for the standardization, radio and development sectors since the ITU's restructuring.

NTIA recognizes both the need for expanded telecommunications markets for U.S. firms and the growing market potential for U.S. firms in developing countries. NTIA will continue to seek innovative ways to assist in the expansion of telecommunications infrastructures in developing countries, thereby expanding potential export markets for U.S. suppliers of goods and services. Cooperative efforts with U.S. trade associations (e.g., the Telecommunications Industry Association and the U.S. Telephone Association), other representatives of U.S. industry and appropriate

Government agencies will continue to assist developing countries in their communications infrastructure development and to enhance market access for U.S. industry.

On-going attention will continue to be focused on linking increased market opportunities in Asia Pacific and Latin America. Activities such as conferences and reverse missions for foreign officials will be employed by NTIA and other U.S. Government agencies to signal to foreign governments that U.S. industry and government are working together to both increase industry's share in lesser-known, burgeoning markets, and to encourage infrastructure improvements. An industry-supported, U.S. Government-led conference will be held in FY 1994 that focuses on the Southeast Asian telecommunications market. This conference will be held in conjunction with the Telecommunications Industry Association and will focus on the member states of the Association of Southeast Asian Nations (ASEAN) and will represent the fourth such conference. A similar conference focusing on Latin American countries is scheduled for July 1993.

NTIA will continue to advocate liberalization policies, regulatory reform and telecommunications enhancement in CITEL meetings and meetings of the Pacific Telecommunications Council (PTC). In FY 1993 and FY 1994, NTIA will participate in the meetings of CITEL and will continue its visible role in the PTC, and will pursue cooperation with the OECD and APEC.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase	
	FTE	Amount	FTE	Amount	FTE	Amount
International Policies	16	$2,052	21	$2,702	+5	+$650
Spectrum Plans and Policies	23	$2,220	26	$2,695	+3	+$475
Spectrum Research & Analysis	22	$1,815	23	$1,953	+1	+$138
Systems & Networks Research & Analysis	18	$1,960	37	$3,672	+1	+$137

Critical International Telecommunications Conference Planning and Participation (+10 FTE, +$1,400) During the next few years, international telecommunications conferences addressing radio spectrum allocation, standard-setting, and regulatory reform, as well as other international coordination and planning activities, will increase substantially in importance and number. These activities, including world administrative radio conferences (WARCs), bilateral and multilateral negotiations, and standards development, will play a critical role in meeting U.S. national objectives for the use of telecommunications. Well-planned, active participation by the U.S. Government, thoroughly coordinated with the private sector, is essential to promoting U.S. global competitiveness in the development of advanced telecommunications technologies and services and the manufacture and sale of telecommunications and related equipment.

- Program Change Explanation and Justification

Recently, in December 1992, the International Telecommunication Union (ITU) made significant changes in the way it conducts its business. Those changes, coupled with adjustments by other nations in their political alignments at WARCs and other events, will materially increase the resources that the United States must dedicate to its ITU activities in order to achieve its objectives in the international telecommunications arena.

The ITU is the oldest United Nations organization with some 170 Member nations; the international conferences held by the organization are the forum for negotiating treaties covering international radio spectrum allocations, radio regulations, telecommunications standards, recommendations affecting tariffing policy, and a variety of other related matters. For U.S. industry, increasingly-oriented toward a global marketplace, these international agreements are extremely important.

In December 1992, at the ITU's Additional Plenipotentiary conference, a new treaty governing the organization's structure and functions was negotiated amongst 138 nations. That treaty, which is provisionally effective as of March 1, 1993 and enters into full force and effect on July 1, 1994, covers all aspects of the ITU's workings. Of particular importance for the United States, however, are three changes:

1. WARCs will be convened on a regular biannual basis, rather than on the ad hoc system previously followed. The United States historically has been able to accomplish its goals at the WARCs through concentrating its preparations into the final 18 months prior to a conference, shifting personnel from other activities (see below). At the most recent WARC (Torremolinos, 1992), experienced observers concluded that the U.S. preparatory process must be substantially improved -- radio spectrum issues have become too technically complex, too controversial and too critical to U.S. users to be left for definition in such a limited time frame. Also, regional organizations, such as the 35 member European Conference of Postal Telecommunications (CEPT) administrations, have become more intent in developing pre-conference agreements among their members, which results in potentially powerful voting blocks. These developments and the new WARC schedule require that a group of professionals be engaged continually in preparing for both the WARC scheduled for two years out and the WARC set for four years out.

2. The operative sectors of the ITU have been redefined and rationalized into a new Radiocommunication Sector and a Standardization Sector. The work program of the new sectors is under discussion with the expectation that certain of the topics considered by the Study Groups of the previous International Radio Consultative Committee (CCIR) will be shifted into the new Standardization Sector and combined with the activities of the previous International Telephone and Telegraph Consultative Committee (CCITT). Further, the operative Study Groups in the Radio sector will be re-directed to focus on the critical technical elements of the upcoming WARC agendas. In the past, the United States has been unable to participate uniformly in the work of the ten CCIR study groups and the fifteen CCITT study groups, due to lack of resources, and it has targeted its participation on those groups seemingly related to issues of greatest strategic importance.

Given the shift in focus, the United States will be required to participate in a greater number of Study Groups and on a more routine basis to ensure it is fully conversant with WARC issues and able to achieve its objectives. Further, outside the radio field, these groups provide the most important international forums for the discussion of many of the issues that arise in connection with the international standards-setting process; the United States -- now confronted with bloc voting from the European nations (through the Conference of European Posts and Telecommunications), the Arab nations, and potentially Asia -- can no longer enjoy the luxury of limited participation at the first stage of negotiations.

3. The ITU has now formalized its creation of a separate Telecommunication Development Bureau (BDT). The BDT also conducts its work through regional and international conferences, and follow-up activities, focusing on development issues. The United States participates extensively; its leadership is needed to ensure that developing nations look to competition and market-opening initiatives as part of their restructuring efforts. As the United States embarks upon its National Information Infrastructure (NII) initiative, it is likely that developing nations will increasingly look to the BDT to serve as a conduit through which the technology advances resulting from the NII can be made available to the member Administrations of the ITU.

Because NTIA has the responsibility for leading the Federal Government's planning and preparations for ITU Conferences, particularly in the radio spectrum arena, the changes described above will impact most heavily on NTIA. A small group of NTIA technical and regulatory experts has followed the ITU program and attempted to maintain critical oversight of U.S. activities in connection with the ITU program.[1]

NTIA's estimated workload for these international activities will approximately double by 1994 and continue at this accelerated pace in subsequent years as the effort to amend the International Radio Regulations intensifies, as U.S. manufacturers seek greater harmonization of U.S. standards with international standards, and as more developing and Eastern bloc countries seek assistance through the ITU. Additional international meetings will be held and this in turn will require increased travel for present staff and corresponding travel for the new staff that must be added to meet the new demands placed upon NTIA's planning, coordination, and leadership role. NTIA will increase its activities to include full-time coverage of a greater number of Study Groups and continuous preparations for WARCs (and possibly other conferences in the Standardization and Development Sectors)[2]. Additional staff are needed to establish a more formal program for Conference preparation and participation and to enhance NTIA's oversight and involvement in the Study Group work.

Increasingly, the linkage between telecommunications technology and services innovations and their impact on U.S. international competitiveness and foreign trade interests is becoming a factor in the ITU forums. At the 1992 WARC, the United States proposed a completely new concept in satellite communications, in which the United States enjoys a distinct technological advantage. U.S. success in obtaining the radio spectrum accommodation to make the concept a reality was not only a technical gain, but potentially a major economic gain. The work being undertaken by the United States to build the NII will require international coordination and agreements to ensure that the nationwide network evolves in a manner that promotes international competitiveness of U.S. telecommunications manufacturers and service providers. In addition, it is necessary that network standards and protocols being developed will eventually lead to interconnectivity and interoperability of networks on a global scale.

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[1] A great deal of the preliminary work for the former CCIR and CCITT technical meetings is done by the private sector. Under provisions of the ITU convention, private sector firms are permitted to participate in both the CCIR and CCITT as a special category of Membership. United States inputs to these two bodies are reviewed and approved by NTIA, the Department of State, and the Federal Communications Commission. These practices will continue under the new ITU structure. Therefore, it is incumbent on NTIA to maintain cognizance over the private sector activity. Furthermore, NTIA acts as chairperson for most Federal Government Conference preparation activities, as U.S. chairperson for many CCIR and CCITT study groups, and most recently as chair or co-chair of U.S. delegations to the new Development Conferences.

[2] Increasingly, the linkage between telecommunications technology and services innovations and their impact on U.S. foreign trade interests is becoming a factor in the ITU forums. For example, at the 1992 WARC, the United States proposed a completely new concept in satellite communications, in which the United States enjoys a distinct trade advantage. U.S. success in obtaining the radio spectrum accommodation to make the concept a reality was not only a technical gain but potentially a major gain economically. The trade factor, too, expands the need for the United States to participate fully in the ITU's Study Groups and conferences.

Exhibit 14

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

PROGRAM CHANGE PERSONNEL DETAIL

Activity: All
Subactivity: International Policies
Spectrum Plans and Policies
Spectrum Research & Analysis and Systems & Networks Research & Analysis
Program Change: Investment Program: Critical International Telecommunications Conference Planning and Participation

Personnel Title:		Grade	Number	Annual Salary	Total Salaries
Communication Policy Specialist		15	1	66,609	66,609
Telecommunications Policy Specialist		15	1	66,609	66,609
Electronic Engineers		14	1	56,628	56,628
Telecommunications Policy Specialist		14	1	56,628	56,628
Telecommunications Policy Specialist		13	2	47,920	95,840
Electronic Engineers		12	2	40,298	80,596
Telecommunications Policy Specialist		12	4	40,298	161,192
Telecommunications Policy Specialist		11	1	33,623	33,623
Secretary		8	1	25,169	25,169
Subtotal			14		642,894
Less lapse	25.00%		(4)		(160,724)
Total full-time permanent			10		482,171
1994 Pay Adjustment					0
					482,171

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	10
Other than full-time permanent	0
Total	10
Authorized Positions:	
Full-time permanent	14
Other than full-time permanent	0
Total	14

Exhibit 15

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: All
Subactivity: International Policies
Spectrum Plans and Policies
Spectrum Research & Analysis and Systems & Networks Research & Analysis
Program change: Investment Program: Critical International Telecommunications Conference Planning and Participation

Object Class	1994 Increase/ (Decrease)
11 Personnel compensation	
11.1 Full-time permanent	482
11.3 Other than full-time permanent	
11.5 Other personnel compensation	
11.9 Total personnel compensation	482
12.1 Civilian personnel Benefits	145
21 Travel and transportation of persons	250
22 Transportation of things	0
23.1 Rental payments to GSA	83
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	28
24 Printing and reproduction	8
25 Other services	236
26 Supplies and materials	56
31 Equipment	112
99 Direct obligations	1400

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
Activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Spectrum management:											
Spectrum plans and policies................	Pos/BA	22	2,080	22	2,211	22	2,220	26	3,095	4	875
	FTE/Obl.	18	2,064	23	2,237	23	2,220	26	3,095	3	875
Spectrum management, analysis and operations..............	Pos/BA	109	8,443	109	8,901	109	8,983	109	8,983	0	0
	FTE/Obl.	91	8,337	110	8,926	110	8,983	110	8,983	0	0
Direct Obligations.........	Pos/BA	131	10,523	131	11,112	131	11,203	135	12,078	4	875
	FTE/Obl.	109	10,401	133	11,163	133	11,203	136	12,078	3	875

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Spectrum Management
Subactivity: Spectrum Plans and Policies

Goal Statement

The goal of this subactivity is to establish plans and policies that ensure the efficient, effective, and equitable use of the spectrum. This subactivity includes: Federal policy formulation, long range planning, international forum preparation/execution and telecommunications emergency planning. The following efforts are performed within the subactivity:

- Formulate and advocate plans and policies for the efficient and effective use of the spectrum by the Federal government.
- Conduct spectrum training courses and seminars for spectrum managers.
- Coordinate and develop the Government's contribution to U.S. proposals and positions for international spectrum management forums.
- Participate in bilateral and multilateral meetings on spectrum management issues with foreign administrations.
- Assist in the development of U.S. proposals and positions for, and participate in international radio conferences.
- Analyze other country proposals relative to the U.S. spectrum management process.
- Implement the results of international radio conferences.
- Initiate and conduct scientific and technical cooperation in the field of telecommunications and spectrum management with specific foreign countries in accordance with U.S. foreign and international trade policy.
- Participate with other Federal agencies in communications emergency readiness planning and implementation.
- Develop emergency/wartime and long-range plans for use of the spectrum.
- Develop procedures, and incorporate them in the planning process for a timely and orderly transition from normal to emergency modes.
- Formulate and advocate plans and policies necessary in the development of strategies to improve and restore U.S. telecommunications resources.
- Investigate and implement advanced technologies for management of the spectrum to increase its effectiveness and efficiency of use by the Federal government agencies thereby maximizing spectrum availability for new technologies in the private and public sectors.
- Develop and implement new policies for increased public participation in spectrum managing and planning efforts.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

Base Program

- Explanation and Justification

As part of its role in establishing Federal spectrum management policy, NTIA allocates and assigns the radio frequency spectrum to Federal users. This responsibility includes chairing the Interdepartment Radio Advisory Committee (IRAC), its major subcommittees and various specialized ad hoc groups. The IRAC, which is a group composed of the representatives of 22 Federal agencies and an FCC liaison, is the primary Executive Branch advisor to NTIA on Federal agency spectrum management. Through the Spectrum Planning, Technical and Frequency Assignment subcommittees as well as several ad hoc groups, the IRAC advises NTIA on spectrum policy and procedural matters and provides recommendations for conflict resolution.

With respect to national spectrum concerns, NTIA, in conjunction with the FCC, formulates long-range spectrum allocation plans that respond to the changing requirements of both Government and non-Government services. Spectrum planning is also conducted relative to wartime and emergency conditions.

In its international spectrum management role, NTIA cooperates with the FCC and the State Department in preparing for diverse international negotiations and forums on spectrum management, allocations and regulation. Specifically, NTIA coordinates and develops the Government's contributions to the U.S. proposals for these forums and helps prepare the preliminary and final national positions. NTIA also analyzes the known intentions of other nations to determine whether U.S. counter-proposals are necessary. In addition, NTIA works towards building confidence worldwide in U.S. spectrum planning techniques to win support for U.S. positions and participates in the negotiations and forums themselves.

NTIA plays a central role in developing and promoting policy and guidance to improve the Government's emergency communications response posture and the protection of information during electronic transmission or processing.

- Statement of Operating Objectives

NTIA will continue to: direct and support the IRAC and its representative subcommittees, both administratively and technically; resolve spectrum management problems among the Federal agencies and other domestic and foreign entities; negotiate with personnel in foreign administrations in support of U.S. aims and goals at international conferences; develop and modify spectrum policies and procedures for crisis-related situations; conduct long-range strategic Federal and private sector spectrum planning in coordination with the FCC; prepare for and participate in the ITU International Radio Consultative Committee (CCIR) Study Groups' activities; provide emergency readiness planning for the Federal use of the radio frequency spectrum; chair and direct the activities of the Spectrum Planning Advisory Council (SPAC); continue spectrum management training activities including support for the U.S. Telecommunications Training Institute (USTTI); formulate policies, issue and revise allocations and regulations concerning Federal spectrum use; identify and provide solutions to issues and deficiencies in the emergency communications planning process in support of the National Communications System (NCS); continue planning and participation in activities associated with the China Protocol; and maintain the openness program by which the private sector can obtain information on the Federal government's use of the spectrum, comment on spectrum sharing issues and provide information on new innovative radiocommunications developments.

NTIA, with the FCC, will determine the future private sector and Government spectrum requirements by major radio service (e.g., landmobile, broadcasting, etc.) and allocated frequency bands. The private sector and Federal Government agency requirements will be partially developed from the responses to an NTIA-issued Notice of Inquiry (NOI) addressing broad spectrum requirements and coordinated with the FCC. A report will be prepared that will specify the requirements. It will recommend the radio services and associated requirements that should be considered in the next phase, spectrum availability evaluation, which will largely be accomplished with the Spectrum Management, Operations and Analysis program. Based on the evaluation, a plan will be developed to reallocate spectrum. The plans would consider economic methods. The NTIA and FCC would develop plans to modify the allocation tables to satisfy the telecommunications requirements. The spectrum redistribution plan will be implemented beginning in FY 1996. This phase will require Congressional legislation, and NTIA, FCC, private sector and Federal agency coordination.

- Measures of Performance

Spectrum Plans and Policies	1993 Estimate	1994 Estimate
• Problem Resolution Sessions directed:		
In the Interdepartment Radio Advisory Committee (IRAC)	26	26
In the Spectrum Planning Subcommittee (SPS)	12	12
In the Technical Subcommittee (TSC)	12	12
In the Frequency Assignment Subcommittee (FAS)	12	12

	1993 Estimate	1994 Estimate
• Training (Number of Persons)	75	75
• International Conferences & CCIR Meetings:		
Preparation meetings for	31	22
Participation in	23	15
Implement results from	0	2
• Problem Resolution Sessions in support of International Conferences and CCIR meetings	130	130
• Develop a joint NTIA/FCC Long-Range Spectrum Plan		
Initial	0	1
Base	0	0
Revision	0	0
• Foreign Protocols		
Established	0	0
Participated in	1	1
Planned	0	0
• Determine the future private sector and Government spectrum requirements by major radio service.	X	
• Develop plans to reallocate spectrum to include consideration of economic methods.		X

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase	
	FTE	Amount	FTE	Amount	FTE	Amount
Spectrum Plans and Policies...	22	$2,220	22	$ 2,620	+0	+$400

- Program Change Explanation and Justification

Spectrum Reallocation: (+0 FTE, +$400) The Administration is proposing legislation that will result in the transfer of 200 megahertz (MHz) of Federal spectrum to the Federal Communications Commission (FCC) for subsequent distribution to the private sector to promote emerging technology. Under the proposed legislation, the Secretary of Commerce will identify the 200 MHz of Federal spectrum to be transferred in coordination with the Federal agencies. The Secretary is required to provide a number of reports to the President and the Congress. Moreover, NTIA plans to make more active use of its spectrum policy advisory committee in undertaking this effort. (Comparable legislation, already introduced in Congress, which has passed the House and is pending before the Senate, requires the active involvement of a new private sector advisory committee.) NTIA will provide for the convening and administering of the advisory committee and for special studies from the private sector involving spectrum planning and the 200 MHz transfer activities.

The proposed legislation also directs the Secretary of Commerce to establish an effective planning mechanism between the FCC and the Department of Commerce. The FCC and DOC would meet at least twice a year to consider future spectrum requirements, develop plans to satisfy these requirements, and promote the efficient use of the spectrum. A joint FCC/DOC annual report would be provided to the Congress.

As another part of this initiative, NTIA plans to conduct an experimental study, probably in conjunction with outside experts, on designing competitive bidding systems for assigning spectrum licenses. Use of competitive bidding for spectrum licenses is a priority with the Administration to improve the current FCC licensing process, encourage efficient use of the valuable spectrum resource, and help reduce the federal deficit. The planned study will provide valuable guidance to the FCC and the Administration on how best to design specific rules for competitive bidding that meet these Administration goals and also protect the needs of entrepreneurs and new entrants, discourage bid-rigging and other forms of collusive behavior, and prevent spectrum hoarding. Because competitive bidding design is a well-established branch of economics, the proposed study could yield substantial practical benefits relatively quickly.

Exhibit 15

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Spectrum Management
Subactivity: Spectum Plans and Policies
Program change: Investment Program: Spectrum Reallocation

Object Class	1994 Increase/ (Decrease)
11 Personnel compensation	0
11.1 Full–time permanent	
11.3 Other than full–time permanent	
11.5 Other personnel compensation	
11.9 Total personnel compensation	0
12.1 Civilian personnel Benefits	0
21 Travel and transportation of persons	220
22 Transportation of things	0
23.1 Rental payments to GSA	0
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	0
24 Printing and reproduction	0
25 Other services	180
26 Supplies and materials	0
31 Equipment	0
99 Direct obligations	400

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Spectrum Management
Subactivity: Spectrum Management, Analysis and Operations

Goal Statement

The goals of this subactivity are to satisfy the frequency assignment needs of the Federal agencies, to provide spectrum certification for new Federal agency radiocommunication systems, to perform the necessary engineering analysis for evaluating and planning spectrum use, and to provide the necessary automated data processing (ADP) capability to perform the above with a high degree of quality and timeliness.

This subactivity includes three major components: Spectrum Management, Spectrum Analysis, and Spectrum Operations. Within this subactivity, Federal applications for frequency assignments are reviewed and processed, use of the spectrum is authorized, and data base files are maintained. Government spectrum management and use is improved by:

- Developing plans for intraservice and interservice sharing in selected bands;
- Evaluating proposed Federal telecommunications systems for certification for spectrum support in accordance with OMB Circular A-11;
- Resolving conflicting requirements concerning Federal agencies' use of the spectrum;
- Planning and coordinating spectrum measurements in selected frequency bands which are conducted under the Telecommunication Sciences Research activity to support spectrum resource assessments, compatibility analyses, and compliance with standards and authorized spectrum usage; and
- Providing technical engineering and policy analysis support in preparation for and participation at international radio conferences and in the development of domestic spectrum policy and long range planning.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

- Explanation and Justification

This subactivity has three components which are discussed below.

(1) Spectrum Management

NTIA reviews, processes, and authorizes Federal radio frequency assignments. Each year the agency receives a number of requests for such assignments and processes approximately 86,000 weighted frequency assignment actions. NTIA also makes on-site inspections of facilities to determine the degree of compliance with authorized use and will continue its reviews of Federal frequency assignments to evaluate the validity of current needs. This frequency assignment responsibility involves chairing the IRAC Frequency Assignment Subcommittee (FAS) as well as directing that Subcommittee's activities and providing its administrative support.

The assignment responsibility also involves ensuring that the spectrum needs of certain Government agencies not represented on the IRAC, the United Nations and foreign embassies are met. NTIA maintains and updates files and records, either hard-copy or computerized, necessary for radio spectrum management. The computerized files include: the Government Master File of Frequency Assignments (GMF); portions of the FCC frequency records necessary for use in Federal spectrum management, especially the management of shared Government/non-Government frequency bands; frequency allocation records; terrain elevation data; and Federal systems review data. These diverse files and records are available to provide varied information and publications for NTIA's staff as well as the rest of the spectrum management community. Some of these data relate to border frequency coordination with Canada and Mexico. A microfiche record of the total GMF and a Directory of Field Contacts is also available.

In addition, 4,500 requests for specialized retrieval from these varied files are expected in support of the activities in spectrum management. The information provided will be used by Federal agencies in proposing frequency assignments and by NTIA personnel in analyzing potential interference problems.

Also within the spectrum management activity, the NTIA Manual of Rules and Regulations governing the Federal Spectrum will be updated and administrative support will be provided to the IRAC, the Spectrum Planning Subcommittee (SPS), the Technical Subcommittee and the IRAC ad hoc groups.

(2) Spectrum Analysis

NTIA conducts in depth analyses of spectrum use, system reviews, and space system reviews; assists Federal agencies in resolving operational problems; provides technical engineering/policy analysis support for international conferences. The in-depth studies evaluate the effect of existing and planned radiocommunication systems on the radio frequency spectrum and provides technical engineering support for domestic policy development and long range planning. These technical/policy analyses will be of two types, the first focusing on the selected portions of the radio frequency spectrum and the second focusing on particular types of uses of the spectrum. Both types of studies will examine present and planned equipment usage to determine if the spectrum is efficiently and effectively used, the potential for compatible sharing of Federal radio services, and the effects of proposed and planned national and international allocation changes on the ability of Federal agencies to complete their mandated missions. NTIA will also investigate the possibility of increased sharing of spectrum resources between Federal and nonfederal radiocommunication systems in order to increase the efficient use of the spectrum within the United States.

Results from NTIA's Radio Spectrum Measurement System and other laboratory measurements will aid in the evaluation of frequency utilization and compliance. In addition, the tests will provide measurement data to support the studies. NTIA will also evaluate data regarding use of frequencies by Federal radio stations to assess the extent and nature of the agencies' use of assignments.

NTIA will continue its system reviews of proposed Federal radiocommunications systems for compliance with Federal regulations and for compatibility with other present and planned systems, its space system reviews of proposed Federal space systems for coordination requirements with foreign countries, and proposed foreign space systems for assessment of compatibility with Federal telecommunication systems. After completion of a preliminary system review, NTIA, with the advice of the Spectrum Planning Subcommittee of the IRAC (interagency advisory group), provides or denies certification of spectrum support for the system or indicates what changes are required in the system before certification can be provided. System reviews are done at the conceptual, experimental, developmental and preproduction stages of a given system's procurement cycle, as required by OMB Circular A-11.

NTIA will resolve operational conflicts that arise between Federal agencies regarding the use of the spectrum and coordinate the process of meeting spectrum requirements that cannot be satisfied within existing policies and procedures. These operational problems are detected through NTIA studies or brought to the attention of NTIA by other agencies. Solving such problems demands analyses of the effects that proposed changes in frequency assignments, operational procedures, or equipment will have on the electromagnetic environment as well as consideration of the various trade-offs between technical and operational factors. NTIA will provide solutions to operational problems involving incompatibility between systems. In support of international spectrum management, NTIA will continue to provide engineering analyses on technical issues necessary to support U.S. participation in and preparation for international conferences and meetings.

(3) Spectrum Operations

NTIA will continue to provide computer facilities and associated software for the data base files supporting spectrum management. Support to spectrum management also includes the update and development of new software to enhance the timeliness and efficiency of the frequency assignment process. To conduct the various reviews and analyses, NTIA continuously assesses its analytical capability to ensure methods of problem solving appropriate to new communication systems and state-of-the-art changes in telecommunications technology.

NTIA develops and maintains analytical computer programs that will permit rapid computation of interference effects between existing and proposed systems. A number of these computer programs must be tailored to fit requirements of specific problems.

- Statement of Operating Objectives

NTIA will: (1) process and authorize frequency assignment actions to ensure interference-free operations to Federal stations; (2) maintain and update spectrum management data bases, and issue changes to regulations/allocations; (3) assess the present and projected Federal use of the spectrum by conducting in depth studies of spectrum use (concentrating on bands and services supporting upcoming international conferences and those where significant improvements in utilization appear possible); (4) resolve operational problems concerning interagency conflicts in the use of the radio frequency spectrum that cannot be satisfied within existing policies and procedures by evaluating trade-offs between technical and operational factors; (5) evaluate proposed Federal systems to determine compatibility with present and other proposed systems, adherence to regulations and availability analysis (resulting in approval with changes in the frequency band, operational procedures or system design, or disapproval); (6) provide technical support to the IRAC, and its subcommittees associated with the preparation and participation in international conferences and CCIR study groups; (7) maintain and update existing computer software used for processing assignments, data bases, and interference calculations; and (8) design or implement new software packages to further improve assignment data processing and analytical engineering evaluation.

To participate effectively in a national planning process, NTIA must have a clear understanding of how the spectrum is used in all sectors of the United States and be able to apply this knowledge to determine how to satisfy both the private sector and federal government requirements for spectrum. NTIA manages the Federal Government agencies use of the spectrum. NTIA maintains a data base of information that shows the authorizations that have been made and the responsible agency. NTIA also has capabilities to analyze and apply this information to ensure radiocommunication operation without harmful interference. Many of these capabilities are computer automated. There is significant room to improve these spectrum management operations and increase the effectiveness and efficient use of the spectrum. Presently, NTIA has no capability or resources to address private sector requirements except on a small case-by-case basis. Therefore, it has been very difficult to fully provide executive guidance on national radiocommunication issues and detailed policies. About 93 percent of the spectrum in the United States is shared by users in both the Federal government and private sectors. For NTIA to clearly address both private sector and Federal government usage, it must know how the spectrum is used by the private sector. To obtain a comprehensive spectrum management data base, NTIA will consolidate information from the FCC with NTIA's data base. With this common data base, automated data processing (ADP) capability, and appropriate analytical capability, NTIA will be able to perform such functions as planning shared spectrum use; assessing spectrum availability for both the private sector and the Federal government; evaluating the impact of new standards or sharing of radio services; and providing a basis to evaluate new spectrum requirements domestically or internationally. Since the data base will be larger than NTIA's present computer can handle, additional ADP capability will be obtained.

NTIA will also determine the private sector and Government spectrum availability based on how the spectrum is presently used in each of the radio services in which new spectrum requirements are projected. Specific spectrum to satisfy the requirements will be identified. The cost to vacate the spectrum by present users and move these users to other bands will be determined. The comprehensive spectrum data base and new or modified analytical capability, implemented during this phase, will be used to perform this task. Technical support will also be provided to develop plans to reallocate spectrum based on the spectrum availability evaluation. The NTIA and FCC would develop plans to modify the allocation tables to satisfy the newly identified telecommunications requirements.

- Measures of Performance

Spectrum Management, Analysis and Operations	1993 Estimate	1994 Estimate
• In-Depth Studies		
Long Range Planning	2	2
International Support	1	1
National Support	2	2
• Weighted Assignment Actions Processed	86,000	86,000
Data Base Retrievals	4,500	4,500
Site Surveys	4	2
• Software Packages		
Modified	130	130
Designed or Implemented	2	2
Software Programs upgraded to computer standards	0	0
• Technical Support for Problem Resolution Sessions for International and CCIR Conferences	115	115
• Technical Support for International Conferences and CCIR mtgs		
Preparation meetings for	4	4
Participation in	4	4
Implement results from	2	2
• System Reviews	88	88
Operational Problems Analyses	2	2
• Develop Emergency Readiness Plans		
Base	0	0
Revisions	1	1
• Studies of Domestic Policy Issues	2	3

	1993 Estimate	1994 Estimate
• Obtain the necessary ADP capability to use a new comprehensive data base that contains both the Federal and private sector frequency use and perform the necessary analysis to determine spectrum usage and availability.	X	
• Develop the necessary analytical capability to support the analysis to determine spectrum usage and availability.	X	
• Develop a new comprehensive data base that contains both the Federal and private sector frequency use.	X	
• Determine the private sector and Government spectrum availability to satisfy future spectrum requirements.	X	X
• Assist in developing a plan to reallocate spectrum based on the usage and availability evaluation.		X

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Telecommunication sciences research:											
Spectrum research and analysis............	Pos/BA	19	1,704	19	1,749	19	1,815	22	2,153	3	338
	FTE/Obl.	33	1,874	22	1,749	22	1,815	24	2,153	2	338
Systems and networks research and analysis............	Pos/BA	18	1,843	18	1,892	18	1,960	24	2,797	6	837
	FTE/Obl.	21	1,591	18	2,072	18	1,960	22	2,797	4	837
Direct Obligations........	Pos/BA	37	3,547	37	3,641	37	3,775	46	4,950	9	1,175
	FTE/Obl.	54	3,465	40	3,821	40	3,775	46	4,950	6	1,175

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: **Telecommunication Sciences Research**
Subactivity: **Spectrum Research and Analysis**

Goal Statement

Through telecommunication research and engineering, NTIA supports Administration telecommunication goals such as enhanced domestic competition, improved foreign trade opportunities for U.S. telecommunication firms, and more efficient use of the radio frequency spectrum. Specifically, the goals of the Spectrum Research and Analysis subactivity are to:

- Coordinate preparations for U.S. participation in international telecommunications conferences (e.g., CCIR, CCITT) and negotiations in cooperation with other interested agencies/Administrations/industry groups.
- Provide technical advice to assist in the development and promulgation of Executive Branch policies relating to domestic and international telecommunications and information issues.
- Continue the technical measurement work related to spectrum occupancy issues supporting NTIA's principal mandate to effectively manage the Federal Government's use of the radio frequency spectrum.
- Accomplish research and engineering to promote technology advancement and the efficient delivery of public services by assisting other Federal agencies, State and local Governments, and private industry in solving specific telecommunications problems.
- Foster the application of research and engineering results through technology transfer and commercialization activities.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

Base Program

- Explanation and Justification

Through the Spectrum Research and Analysis subactivity, NTIA performs state-of-the-art telecommunication research and engineering to further applied knowledge of the radio frequency spectrum and to improve telecommunications system planning, design and evaluation. Efforts include research directed toward improving the understanding of radio-wave transmission to enhance spectrum utilization and the performance of radio-communication systems. Important results of this research are spectrum use concepts and models that lead to more efficient industry and Government use of the radio frequency spectrum, and electromagnetic wave and propagation models that lead to improvement in radio system performance. This knowledge base is essential to support NTIA's policy development, spectrum management responsibilities, and technical support to other Federal agencies. These research and engineering efforts are directed toward improving the U.S. telecommunications technology base and providing a technical foundation for Administration telecommunications policy development in national and international arenas.

As a result of these activities, NTIA has established a core telecommunications research expertise that is accessible to both the public and private sector. Through reimbursable agreements with other Federal agencies, NTIA applies its expertise to practical problems in telecommunications today. For example, both other government agencies and the private sector have access to NTIA's advanced propagation models through two methods: 1) purchase of select models through the National Technical Information Service, or 2) direct access, at cost, to an automated service which provides the opportunity to apply the latest models to a specific problem. The combination of direct-funded NTIA efforts and other agency-sponsored work operates in a synergistic manner, leading to greater contributions to and reinforcement of NTIA's telecommunication policy oversight and spectrum management roles.

As part of NTIA's mandate to oversee the usage of the radio frequency spectrum by Federal agencies, NTIA maintains a mobile capability to monitor and measure the actual use of the spectrum. In FY 1992, NTIA replaced the Radio Spectrum Measurement System (RSMS) van which is equipped with instrumentation that can monitor signals between 10 kHz and 20 GHz. NTIA utilizes this system to perform measurements in the land mobile and radar bands at selected sites, and make other specialized measurements as necessary to ensure compliance with frequency assignment rules and regulations. NTIA's efforts are directed toward the measurement of spectrum usage in these selected bands and summarizing the results in support of specific IRAC concerns. The RSMS is also available for other agency applications on a reimbursable basis. In FY 1993 and 1994, measurements will be undertaken on behalf of the U.S. Air Force and NSA to assess spectrum occupancy use and radio interference concerns. NTIA will also be assisting various Department of Defense (DoD) agencies to operate efficiently their own radio monitoring programs through technical consultations, and modification, design and construction of new radio monitoring systems. This work is based heavily on expertise developed for the RSMS, but it also provides an important means of investigating the use of advanced measurement hardware and software for the RSMS itself. As the requirements for measurements evolve, NTIA must continue to develop improved software and measurement techniques to support these increasingly sophisticated technical activities.

Spectrum Resource Assessments are performed as required in order to assess current and future Federal use of the spectrum and determine where significant improvements in utilization appear possible. These activities will continue to support essential spectrum utilization analyses ongoing at NTIA. Technical support will be continued on major frequency management concerns through representation at technical subcommittee (IRAC) meetings with principal emphasis on improving Federal spectrum use and reallocating portions of that spectrum to the private sector.

As the need evolves for telecommunication systems throughout the world to become integrated, the trend is towards providing diverse services, such as audio, video, data, broadcasting, and common carrier services through an integrated system of fiber optics, satellites, and broadband radio systems. Despite the increasing role of fiber optics as the backbone of integrated networks, radio still has an important role in portable and mobile communications, and will play an increasingly important role as the method of choice for connecting the end user to the network and for providing a variety of personal communication services. Another trend becoming evident as technology advances is that of radio systems utilizing higher frequencies. In fact, many radio systems are already moving into the millimeter wave band, which is located at the upper end of the allocated radio spectrum (30-300 GHz). These frequencies can transmit vastly more information than is currently possible with the lower frequencies that are used in microwave relay systems. In addition, reallocating existing frequency users of lower bands to these higher frequency ranges will help ease the congestion experienced at the lower bands as well as provide for additional frequency availability.

NTIA continues to provide support to the development of personal communication services (PCS). Measurements and modeling of the propagation of radio waves on short paths in man-made environments are crucial for the development of effective policy and planning and for the development of commercially viable systems. NTIA continues to support private industry in their PCS technology development efforts through technology transfer under cooperative research and development agreements (CRADA). Under CRADAs with U.S. West, Advanced Technologies, Inc., and Telesis Technologies Laboratory, Inc., NTIA is making measurements necessary to determine optimum design parameters for PCS systems. Efforts in FY 1993 and FY 1994 will provide models of area coverage for PCS systems and limited simulation capabilities.

Two major objectives are currently served by the broadband radio program to promote the orderly and effective commercial development of broadband radio systems. One objective is to support the development of wireless local area networks (WLAN) through models supported by measurements that enable the accurate prediction of broadband communication link performance as limited by propagation. These models serve as a basis for system planning and design as well as spectrum regulation. Major contributions are also provided to standards development through participation in the IEEE 802.11 Standards Committee. To this end, NTIA's studies are currently directed towards a better understanding of the behavior of broadband radio waves in indoor environments. A second objective is to demonstrate the viability of various broadband radio systems including millimeter wave systems. These demonstrations are meant to elucidate, in a convincing manner, the possible effective uses of millimeter waves for telecommunications and so accelerate commercial development.

Under other agency agreements, NTIA's broadband radio program provides information to a variety of users for purposes including governmental regulation of the radio spectrum, development of defense systems, and design of telecommunication systems. A variety of DoD sponsors have funded projects geared toward their particular application of millimeter-wave technology. The Microwave Operational Scenario Evaluation

Software (MOSES) program was developed by NTIA to cover a broad scope of applications. It predicts various performance measurement parameters for earth-satellite, earth-air-earth, aircraft-satellite, and terrestrial millimeter wave links. More recently, this software has been extended to cover the entire radio spectrum under U.S. Army sponsorship and has resulted in the Radio Operational Scenario Evaluation Software (ROSES). The broader thrust of the NTIA effort serves as an underpinning for the more focused work performed for specific Federal agencies in accommodating their particular system needs.

The demand for new and expanding telecommunication systems such as advanced television (ATV) systems, cellular mobile telephone, and radio navigation systems has placed increased burdens on spectrum planners and policy makers. To address this situation NTIA develops fundamental data and more accurate modeling of radio propagation that will lead to improved methods of planning spectrum sharing among the various users. Many systems of today, and especially those in the near future, are transmitting signals using wide frequency bandwidths that are necessary for the large amounts of information being sent. Many of the new systems are using digital modulation. Predicting how these systems can share the same spectrum space requires a better understanding of broadband radio propagation and the use of multi-dimensional modeling techniques. In FY 1992, NTIA developed a model of the transmission channel characteristics for ATV broadcasting. It is anticipated that NTIA's analysis of data and the resulting model will provide important contributions to the ATV issue. The propagation models developed from these measurements are needed to identify the nature and degree of the propagation effects which may limit the use of VHF/UHF broadcasting for ATV. NTIA will provide propagation measurement support to the over-the-air testing of candidate advanced television systems.

- Statement of Operating Objectives

FY 1994 operating objectives for the Spectrum Research and Analysis subactivity are summarized by program area below.

Radio Spectrum Measurement System: Provide measurements of environmental radio signals for the purpose of resolving selected frequency management problems.

Spectrum Resource Assessments: Complete one spectrum resource assessment (SRA).

Personal Communication Services: Study and characterize the propagation of radio waves in outdoor man-made environments for personal communication services (PCS).

Broadband Radio: Study and characterize the transmission channel for within-building wireless local area networks.

Advanced Television Systems: Provide assistance in analyzing ATV systems in over-the-air testing.

- Measures of Performance

	1993 Estimate	1994 Estimate
# of spectrum analysis studies to improve Government spectrum use	4	4
# of propagation models to assist Government and other users of radio systems	2	2

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Telecommunication Sciences Research
Subactivity: Systems and Networks Research and Analysis

Goal Statement

Through telecommunication research and engineering, NTIA supports Administration goals of enhancing domestic competition and improved foreign trade opportunities for U.S. telecommunication firms. Specifically, the goals of the Systems and Networks Research and Analysis subactivity are to:

- Coordinate preparations for U.S. participation in international telecommunications conferences (e.g., CCITT, CCIR) and negotiations in cooperation with other interested agencies/Administrations/industry groups.
- Provide technical advice to assist in the development and promulgation of Executive Branch policies relating to domestic and international telecommunications and information issues.
- Accomplish research and engineering to promote technology advancement and the efficient delivery of public services by assisting other Federal agencies, State and local governments, and private industry in solving specific telecommunications problems.
- Foster the application of research and engineering results through technology transfer and commercialization activities.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that NTIA obtain an authorization of its annual appropriation. NTIA's functions were codified in the NTIA Organization Act, which became law as part of the Telecommunications Authorization Act of 1992, Public Law No. 102-538, 106 Stat. 3533 (1992). Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of NTIA will be proposed for FY 1994 and FY 1995.

Base Program

- Explanation and Justification

Through the Systems and Networks Research and Analysis subactivity, NTIA performs studies directed toward developing domestic and international telecommunications standards, assessing the performance of industry and Government telecommunication networks, and evaluating new technologies for application to future needs. These activities facilitate competition in the U.S. telecommunications industry, promote international trade opportunities for U.S. telecommunication firms, and improve the cost effectiveness of Government telecommunications use.

In its international standards activity, NTIA is working to expand trade opportunities for U.S. Telecommunications and Information (T&I) providers by leading and supporting U.S. participation in key technical negotiations of the CCITT and the CCIR. NTIA's standards activities under Systems and Networks Research and Analysis are focused on technical aspects of International standards development. They complement NTIA's efforts in the international policy area.

NTIA continues its leadership of U.S. CCITT Study Group B on Integrated Services Digital Networks (ISDNs) at the request of the Department of State and continued a leadership responsibility for ISDN performance standards development within CCITT Study Group XVIII. ISDN is a rapidly-evolving digital network technology which will ultimately provide integrated data, voice, and video communication services to subscribers on a worldwide basis. NTIA will promote U.S. domestic competition and international trade objectives by continuing its leadership of U.S. CCITT Study Group B, and will continue to lead a major new CCITT work program aimed at developing comprehensive performance standards for ISDNs. NTIA will sustain its effort to broaden and strengthen U.S. industry participation in international standards development through seminars and workshops, conference presentations, technical publications, and the provision of standards information services.

NTIA's international standards activities are complemented by active involvement in the development of U.S. standards for ISDNs and advanced packet-switching networks within the American National Standards Institute (ANSI)-accredited T1 (Telecommunications) Standards Committee. NTIA continues its leadership of Working Group T1Q1.3, which is responsible for developing performance standards for U.S. digital networks including ISDNs. Also, NTIA continued its participation in the T1S1 Subcommittee, which is responsible for the development of U.S. standards for switching and signaling in emerging narrowband and future broadband ISDNs; and in Working Groups T1A1.5 and T1A1.6, which are responsible for developing advanced digital voice and video encoding standards. NTIA will develop formal contributions to national and international standards committees proposing technical solutions to some of the most compelling issues facing U.S. telecommunications planners, including the interoperation of multi-vendor systems (cable, microwave, fiber, satellite) in a competitive environment and the key ISDN problem of economical resource sharing among integrated services. NTIA's results will promote competition and innovation in the provision of integrated broadband digital services and will facilitate efficient matching of such services with user needs. NTIA will continue to lead and coordinate standards development in key U.S. telecommunications industry forums in, and will work to ensure that emerging U.S. ISDN standards are consistent with a competitive market environment and with applicable NTIA and FCC policy guidelines. The technical standards developed in these T1 forums during the next few years will influence network planning and procurement decisions spanning the 1990s and involve hundreds of billions of dollars in capital investment.

NTIA's international and U.S. standards committee leadership is supported by telecommunications research and engineering activities directed towards the development, implementation, and promulgation of user-oriented performance measures for integrated data, voice, and video communications equipment and services. NTIA continued the development of a prototype ISDN performance measurement laboratory implementing NTIA-developed national and international telecommunication performance standards, and continued research aimed at developing user-oriented, technology-independent performance parameters and measurement methods for digital voice and video communication services. Also, NTIA continued its research efforts in digital video communication services supporting such future applications as video telephony and teleconferencing, computer-aided design and manufacturing, and High Definition Television. A specific goal will be to define technology-independent performance measures to facilitate a comparative evaluation of fiber optic, coaxial cable, and satellite transmission media in communicating high-definition video signals. These efforts continue to be strengthened by various other agency projects. ITS will further expand its integrated voice/video/data communication performance studies through cooperative programs with private industry organizations.

NTIA is also involved in the development of Federal and domestic standards with other agency funding, including technical aspects of Federal standards, interoperability analyses, and technical and economic impact assessments. Often, concepts advocated by NTIA in the domestic and international standards arena serve equally well in the Federal standards area. Thus, there is much synergy between the two activities as NTIA works to promote the overriding goals of open competition and unrestricted technology advancement.

NTIA continues a major research effort aimed at promoting effective integration of advanced satellite systems with broadband terrestrial systems in future broadband ISDNs. Studies examined ISDN technologies and service requirements, identified relevant advanced satellite system capabilities, and outlined alternative architectures for integration of satellite-based transmission and switching systems with ultra-high speed terrestrial networks. NTIA will continue to examine the questions of network management for these integrated networks, appropriate services to be provided by the networks, and performance of the networks in providing these services, giving particular attention to the interface and functional standards required. Results will be disseminated in technical reports, open literature publications, and contributions to national and international standards committees including both CCITT and CCIR. Benefits will include enhanced efficiency and survivability in national and international broadband telecommunication services and continued strength in the U.S. satellite communications industry.

In a related program, NTIA will continue its work in developing and characterizing prototype test equipment and methodology for measuring advanced satellite system performance using NTIA-developed national and international telecommunication performance standards. These test sets and associated methodology will be used to establish baseline performance of conventional satellite systems prior to the testing that is planned with the advanced satellite systems. These activities, in part, support NTIA's responsibilities in the NASA-sponsored Advanced Communications Technology Satellite (ACTS) initiative. The ACTS, which will be launched in mid 1993, will implement and optimize high-risk technologies that offer substantial improvements in spectrum and orbit efficiency and will facilitate new broadband satellite applications. Successful implementation of ACTS capabilities is essential to maintaining U.S. leadership and international trade opportunities in satellite equipment and services.

- Statement of Operating Objectives

FY 1994 operating objectives for the Systems and Networks Research and Analysis subactivity are summarized by program area below.

International Standards: In cooperation with U.S. CCITT Study Group B and the U.S. CCITT National Committee, continue development of positions for the 1996 CCITT Plenary Assembly. Prepare new Recommendations on ISDN and Broadband ISDN performance to Study Group XVIII and the CCITT Plenary Assembly for approval.

Domestic Standards: Provide strong leadership and continued technical support to Telecommunications Standards Committee T1. Prepare and coordinate final technical contributions to proposed new CCITT Recommendations impacting U.S. telecommunications policy and trade objectives. In cooperation with other T1 participants, develop proposed American National Standards defining ISDN and Broadband ISDN interfaces and protocols consistent with those specified in related CCITT Recommendations.

Performance Assessment: Continue development and implementation of technology-independent performance measures for user-oriented assessment of advanced video communication services. Integrate these measures with previously-defined voice and data quality measures, and in cooperation with industry participants, demonstrate their joint operation in ISDN and Broadband ISDN performance evaluation. Present measurement results in open literature publications.

Advanced Satellites: In cooperation with U.S. industry participants, define technical requirements for interface, signalling, and network management and control standards required to effectively integrate terrestrial and satellite-based ISDN transmission and switching facilities. Conduct measurements of conventional satellite system baseline performance.

- Measures of Performance

Measures of Performance	1993 Estimate	1994 Estimate
# of technical planning and evaluation efforts in support of Government and private sector telecommunication systems and networks	5	4
# of contributions to the development of national and international telecommunication standards	3	6
# of standards committee meetings headed	4	6

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
INCREASE FOR 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase	
	FTE	Amount	FTE	Amount	FTE	Amount
Spectrum Research & Analysis	22	$1,815	23	$2,015	+1	+$200
Systems & Networks Research Analysis	18	$1,960	20	$2,460	+2	+$500

Telecommunications Infrastructure Research and Development (+3 FTE, +$700) A significant element of NTIA's research and development program is focused on fostering unique and innovative telecommunications infrastructure projects, that will effectively utilize enhanced networking capabilities. Indeed, rapid advances in networking technologies, e.g., Broadband Integrated Services Digital Networks (B-ISDN) and Intelligent Networks (IN), will profoundly affect the evolution of our National Information Infrastructure (NII) -- providing the foundation for the telecommunications superhighways of the future -- and will have a major impact on U.S. competitiveness in international telecommunications markets and sustained U.S. economic growth. The results of NTIA's efforts to develop performance standards for network planning and operation will facilitate the implementation of the National Information Infrastructure through the deployment of efficient, high-capacity communication systems. Without at all displacing the primary role of the private sector in this area, government, as a primary procurer and user of telecommunications systems and services, as a facilitator in establishing an open and fair competitive marketplace for U.S. telecommunications firms, and as an "honest broker" without proprietary economic interests, can play critically important policy and technical roles in standards development. Work in this area will build upon NTIA's ongoing efforts in broadband networks and personal communications services (PCS), which are essential elements in the evolving advanced telecommunications systems and National Information Infrastructure initiative.

- Program Change Explanation and Justification

U.S. telecommunication networks are in a state of dramatic transition, in which "smart" capabilities are being incorporated into telecommunications networks and terminals at an ever increasing rate. These capabilities will be provided by new network architectures incorporating computers, vast databases, and software that will provide highly adaptive services and be part of the NII. With these networks in place, systems will function more efficiently and cost effectively, and new services can be added more easily and be tailored to meet each users needs. These features are vitally important to the U.S. as public and private telecommunications systems providers and users, e.g., large and small businesses, state and local governments, health and educational service providers, and many others, increasingly employ advanced communications systems to improve their productivity and competitiveness.

The telecommunications network is an integral part of the information infrastructure of the United States. U.S. telecommunications service revenues in 1993 alone are estimated to be in excess of $170 billion. As such, timely and efficient market introduction of new network services is vital to our economy as well as the overall quality of life of our citizens. And, because advanced communications networks are evolving worldwide, significant potential for U.S. export of hardware, software, and services that could have economic impact in the hundreds of billions of dollars for the United States.

Work is underway domestically and internationally to plan for and specify standards for "intelligent" telecommunications networks so that advanced capabilities can be efficiently developed and implemented. The United States is involved in the initial standards setting efforts and U.S. companies are testing selective advanced networks and features. However, other countries are also actively pursuing networking advances. Telephone carriers in several countries are creating high capacity networks to provide enhanced services to users. The European Community, through its Research and Development in Advanced Communications Technologies in Europe (RACE), as well as Japan and the Pacific Rim countries, have already allocated major resources to implement advanced network technology. The United States must take vigorous action to assure that the goal of developing a nationwide information infrastructure is implemented. Thus, NTIA will increase its research efforts to:

- Initiate the development of performance measures for the advanced network functions that will be critical elements of the NII initiative.

- Begin evaluation of advanced telecommunication services by conducting performance measurements, and developing tools and techniques for various service applications, e.g., simulated and real world testing and pilot project demonstrations using NTIA-developed performance measures.

- Work with other key players (e.g., the Office of Science and Technology Policy), to enhance standards leadership and technical contributions to networking standards forums (e.g., T1, TIA, and CCITT), as the NII program evolves. NTIA will provide key technical contributions to these standards setting bodies.

- Transfer to the appropriate industry segments, the performance measures and underlying technologies for incorporation into network operations and services.

Today, NTIA is providing key, but limited, leadership and technical contributions toward fostering the introduction of advanced telecommunications technology networks and services to the benefit of the public and private sectors. More research work is required of NTIA in order to assure that the Administration's goal of providing a 21st century information infrastructure to all Americans is to be realized. The benefits are substantial -- lower cost to the user, new services provided to ordinary citizens, uniform service operations, customized service applications, and more.

Exhibit 14

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Telecommunication Sciences Research
Subactivity: Spectrum Research & Analysis and Systems & Networks Research & Analysis
Program Change: Investment Program: Telecommunications Infrastructure Research and Development

Personnel Title:		Grade	Number	Annual Salary	Total Salaries
Electronics Engineers		14	2	56,627	113,254
Electronics Engineer		13	1	47,920	47,920
Electronics Engineer		12	1	40,298	40,298
Subtotal			4		201,472
Less lapse	25.00%		(1)		(50,368)
Total full-time permanent			3		151,104
1994 Pay Adjustment					0
					151,104

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	0
Total	3
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	0
Total	4

Exhibit 15

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Telecommunication Sciences Research
Subactivity: Spectrum Research & Analysis and Systems & Networks Research & Ananalysis
Program change: Investment Program: Telecommunications Infrastructure Research and Development

Object Class	1994 Increase/ (Decrease)
11 Personnel compensation	
11.1 Full–time permanent	151
11.3 Other than full–time permanent	
11.5 Other personnel compensation	
11.9 Total personnel compensation	151
12.1 Civilian personnel Benefits	50
21 Travel and transportation of persons	40
22 Transportation of things	10
23.1 Rental payments to GSA	0
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	0
24 Printing and reproduction	4
25 Other services	57
26 Supplies and materials	16
31 Equipment	372
99 Direct obligations	700

Exhibit 16

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase (Decrease)
11 Personnel compensation					
11.1 Full-time permanent	9,101	10,321	10,197	10,978	781
11.3 Other than full-time permanent	556	306	301	301	0
11.5 Other personnel compensation	171	58	58	58	0
11.9 Total personnel compensation	9,828	10,685	10,556	11,337	781
12.1 Civilian personnel Benefits	1,709	2,152	2,293	2,532	239
21 Travel and transportation of persons	492	416	431	981	550
22 Transportation of things	12	8	8	20	12
23.1 Rental payments to GSA	1,463	1,537	1,583	1,679	96
23.3 Commun., util., misc. charges	552	830	842	875	33
24 Printing and reproduction	160	209	217	238	21
25 Other services	2,058	1,631	1,630	2,279	649
26 Supplies and materials	418	189	195	283	88
31 Equipment	767	1,172	1,172	1,703	531
99 Subtotal, Direct Obligations	17,459	18,829	18,927	21,927	3,000
Reimbursable Obligations	8,203	8,800	8,800	8,800	0
TOTAL OBLIGATIONS	25,662	27,629	27,727	30,727	3,000
Personnel Data					
Direct:					
Total number of full-time permanent positions	195	195	195	217	22
Total compensable workyears:					
Full-time equivalent employment	200	203	203	219	16
Full-time equivalent of overtime and holiday hours	3	6	3	3	0
Reimbursable:					
Total number of full-time permanent positions	80	69	69	69	0
Total compensable workyears: Full-time equivalent employment	68	69	69	69	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11 Personnel compensation				
11.1 Full-time permanent				
Executive level		108	108	0
Senior executive service	88	1,282	1,282	0
General schedule	605	8,807	9,588	781
Subtotal	693	10,197	10,978	781
11.3 Other than full-time permanent				
General schedule		301	301	0
Subtotal	0	301	301	0
11.5 Other personnel compensation				
Overtime		34	34	0
Cash awards		24	24	0
Subtotal	0	58	58	0
11.9 Total personnel compensation	693	10,556	11,337	781
12.1 Civilian personnel benefits				
Civil service retirement	-17	99	99	0
Federal employees' retirement	83	801	900	99
Thrift savings plan	16	183	199	16
Federal insurance contribution act	60	454	502	48
Health insurance	83	686	753	67
Life insurance	2	34	38	4
Employees' compensation fund	-5	36	36	0
Other		0	5	5
Subtotal	222	2,293	2,532	239

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
21 Travel and transportation of persons				
Common carrier		211	486	275
Per diem/actual	15	211	486	275
Other		9	9	0
Subtotal	15	431	981	550
22 Transportation of things		8	20	12
23.1 Rental payments to GSA	46	1,583	1,679	96
23.3 Communications, utilities and miscellaneous charges				
Rental of ADP equipment		428	442	14
Rental of office copying equipment		93	97	4
Other equipment rental		31	32	1
Federal telecommunications system		155	162	7
Other telecommunications services	12	103	107	4
Postal Service by USPS		32	35	3
Other		0	0	0
Subtotal	12	842	875	33
24 Printing and reproduction				
[Payments to WCF]		195	203	8
Boulder printing	8	22	35	13
Subtotal	8	217	238	21
25 Other services				
Training:				
Office of personnel management		8	42	34
Other		13	67	54
Other federal agencies:				
National Oceanic and Atmospheric Admin. – Cross Services		164	189	25
National Institute of Standards and Tech. – Cross Services	11	287	329	42
National Institute of Standards and Tech. – Acctg Services		154	169	15
Other agencies		2	2	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
Maintenance of equipment		119	130	11
GSA reimbursable services		41	41	0
Payments to WCF	14	639	675	36
Transfer to GA		0	0	0
Other		203	635	432
Subtotal	25	1,630	2,279	649
26 Supplies and materials				
Office supplies	3	120	174	54
ADP supplies	3	75	109	34
Subtotal	6	195	283	88
31 Equipment				
ADP equipment		712	1,053	341
Equipment depreciation		102	102	0
Other		358	548	190
Subtotal	0	1,172	1,703	531
99 Subtotal, Direct Obligations	1,027	18,927	21,927	3,000
Reimbursable Obligations	0	8,800	8,800	0
TOTAL OBLIGATIONS	1,027	27,727	30,727	3,000

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
APPROPRIATIONS LANGUAGE AND CODE CITATIONS:

For necessary expenses, as provided for by law, of the National Telecommunications and Information Administration, $18,927,000, to remain available until expended. (Authorizing legislation to be proposed.)

15 U.S.C. § 1512
15 U.S.C. § 1532
47 U.S.C. § 305
47 U.S.C. § 606
47 U.S.C. § 701, et. seq., §§ 721, 744
47 U.S.C. § 901

15 U.S.C. § 1512 authorizes the Secretary of Commerce to foster, promote and develop foreign and domestic commerce. The telecommunications industry is both an integral part of the Nation's commerce and a key mechanism on which much of the Nation's work relies. Activities undertaken by the Secretary to improve the Nation's telecommunications industry relate directly to the Secretary's mandate under 15 U.S.C. 1512.

15 U.S.C. § 1532 authorizes the Secretary of Commerce to conduct research pertaining to the transmission of radio waves, to compile and distribute related information, and undertake related activities.

47 U.S.C. § 305 authorizes the President to assign frequencies for U.S. government radio stations. Certain functions related to this authority were delegated to the Department of Commerce by Executive Order 12046.

47 U.S.C. § 606 and associated Executive Orders authorize the President to perform certain telecommunications emergency functions.

47 U.S.C. § 701 et. seq., particularly §§ 721 and 744 authorize the President to perform certain functions related to the planning and development of a national program for the establishment and operation of a commercial communications satellite system.

Public Law 102-538, to be codified in 47 U.S.C. § 901, authorizes the National Telecommunications and Information Administration (NTIA), as an agency in the Department of Commerce, to be executive branch agency principally responsible for advising the President on telecommunications and information policy.

In addition to the amounts otherwise available under this head, and subject to the same terms and conditions, $3,000,000 to remain available until expended.

The investment request is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

CONSULTING AND RELATED SERVICES

(Dollar amounts in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$ 2	$ 5	$ 432
Management and professional services	.....	.....	.....
Special studies and analyses	.....	.....	.....
Management and support services for research and development	.....	.....	.....
Total	$ 2	$ 5	$ 432

Consulting services: NTIA utilizes consultants throughout its programs to provide scientific or technical expertise in specialized areas.

Examples of the type of work include:

Spectrum Policies - for telecommunications experts to participate in Spectrum Planning Advisory Committee.

- for telecommunications experts to participate in special studies involving spectrum planning and the 200 MHz transfer activities.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS

(Dollar amounts in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	1	33	30	30
Audiovisual products	4	42	15	15
Total	$ 5	$ 75	$ 45	$ 45

NTIA utilizes pamphlets to provide an overview of NTIA programs and services to the public. Audiovisual and graphic products are used for administrative briefings and training sessions for NTIA employees.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Salary	$105,472	$109,664	$109,664
Average GS/GM Grade	11.5	11.5	11.6
Average GS/GM Salary	$44,646	$ 44,646	$ 46,749

Exhibit 5

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget	45	20,254	30	21,958
	Plus: Dec 17, 1992 Proposed Transfers not approved (allowed by P.L. 102–395)		0		0
	Amount currently available, 1993	45	20,254	30	21,958
	Plus: Tranfers per P.L. 102–395 subsequently implemented		1,066		1,066
	Appropriation, 1993	45	21,320	30	23,024
	less: Obligations from prior years				(1,704)
	plus: 1994 Adjustments to base	(30)	(684)	(15)	(684)
	1994 base	15	20,636	15	20,636
	plus: 1994 program changes	0	0	0	0
	1994 estimate	15	20,636	15	20,636

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Comparison by activity/subactivity, with subtotals by activity		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA–78	Public Telecommunications Facilities, Planning and Construction:											
	(a) Grants....................	Pos/BA	0	22,760	0	18,754	0	18,541	0	18,541	0	0
		FTE/Obl.	0	21,545	0	20,104	0	18,541	0	18,541	0	0
	(b) Program Management	Pos/BA	15	2,222	45	1,500	15	2,095	15	2,095	0	0
		FTE/Obl.	15	1,734	30	1,854	15	2,095	15	2,095	0	0
	Total..................	Pos/BA	15	24,982	45	20,254	15	20,636	15	20,636	0	0
		FTE/Obl.	15	23,279	30	21,958	15	20,636	15	20,636	0	0
	Adjustments for:											
	Recoveries			(3,262)								
	Unobligated balance, start of year			(1,795)		(1,704)						
	Unobligated balance transfered											
	Unobligated balance, end of year			1,704								
	Unobligated balance expiring											
	Financing from transfers:											
	Transfers from other accounts		0	0	0	0	0	0	0	0	0	0
	Transfers to other accounts		0	0	0	1,066	0	0	0	0	0	0
	Appropriation		15	19,925	30	21,320	15	20,636	15	20,636	0	0

Exhibit 7

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Total Obligations	23,279	21,958	20,636	20,636	0
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries	(3,262)	0	0	0	0
Unobligated balance, start of year	(1,795)	(1,704)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	1,704	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	19,925	20,254	20,636	20,636	0
Financing:					
Transfer to other accounts	0	1,066	0	0	0
Transfer from other accounts	0	0	0	0	0
Appropriation	19,925	21,320	20,636	20,636	0

Exhibit 8

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Permanent Positions	FTE	Amount
Other Changes:			
Annualization of positions financed for part-year in FY 1993	0	15	0
Transfer FTEs to Salaries and Expenses	(16)	(16)	0
Transfer FTEs to Information Infrastructure Grants	(14)	(14)	0
Limit on grants overhead	0	0	(91)
Continuation of 1993 Operating Level	0	0	(593)
Subtotal, Other Changes	(30)	(15)	(684)
Total adjustments to base	(30)	(15)	(684)

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

Other Changes:	FTE	Amount
Annualization of positions financed for part-year in FY 1993 NTIA is requesting additional FTEs for the 30 positions lapsed during FY 1993 and only financed for half of the year.	15	0
Transfer FTE's to Salaries and Expenses NTIA is requesting a one-time transfer of 16 FTE's from the PTFPC appropriation to Salaries and Expenses.	(16)	0
Transfer FTE's to Information Infrastructure Grants NTIA is requesting a one-time transfer of 14 FTE's from the PTFPC appropriation to the Information Infrastructure Grants appropriation.	(14)	0
Limit on Grant Overhead Pursuant to the Executive Order on Deficit Control and Productivity Improvement in the Administration of the Federal Government, there will be a savings of $91,000 in 1994 for administrative expenses, specifically, limits on grants overhead.	0	(91)
Continuation of FY 1993 Operating Level The reduction of $593,000 is consistent with the 1993 operating level as approved by Congress.	0	(593)

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Comparison by activity/subactivity, with subtotals by activity		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA– Public Telecommunications Facilities, Planning and Construction:											
(a) Grants....................	Pos/BA	0	22,760	0	18,754	0	18,541	0	18,541	0	0
	FTE/Obl.	(0)	(21,545)	(0)	(20,104)	(0)	(18,541)	(0)	(18,541)	(0)	(0)
(b) Program Management	Pos/BA	15	2,222	45	1,500	15	2,095	15	2,095	0	0
	FTE/Obl.	(15)	(1,734)	(30)	(1,854)	(15)	(2,095)	(15)	(2,095)	(0)	(0)
Subtotal....................	Pos/BA	15	24,982	45	20,254	15	20,636	15	20,636	0	0
	FTE/Obl.	(15)	(23,279)	(30)	(21,958)	(15)	(20,636)	(15)	(20,636)	(0)	(0)

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction

Justification of Program and Performance

Activity: Public Telecommunications Facilities, Planning and Construction
Subactivity: Public Telecommunications Facilities, Planning and Construction

Goal Statement

The public telecommunications facilities, planning and construction appropriation supports two program activities, the Public Telecommunications Facilities Program (PTFP) and the Pan-Pacific Educational and Cultural Experiments by Satellite (PEACESAT) program. The goal of PTFP is to assist, through matching grants, in the planning and construction of public telecommunications facilities in order to achieve the following objectives: (1) extend delivery of public telecommunications services to as many citizens of the United States as possible by the most efficient and economic means, including the use of broadcast and nonbroadcast technologies; (2) increase public telecommunications services and facilities available to, operated by and owned by minorities and women; and (3) strengthen the capability of existing public television and radio stations to provide public telecommunications services to the public. The goal of the PEACESAT Program is to reestablish satellite telecommunications to serve the educational, medical and cultural needs of many isolated Pacific island nations.

Proposed Legislation

Public Law 102-356 authorizes the PTFP program through FY 1994.

Base Program

- Explanation and Justification

Public telecommunications facilities refers to technologies which allows the population to receive a variety of non-commercial educational and cultural services, including public broadcasting, interactive microwave systems, instructional television fixed services, satellite delivery systems, and fiber optic systems and other digital technologies. For over 30 years, NTIA and its predecessor agencies have been providing the necessary hardware to non-commercial entities throughout the United States and its territories to allow for the broadcast of public television and radio, the delivery of instructional and educational services to a broad array of communities, the reception of signals by the hearing impaired and the visually handicapped, and the provision of services for specialized groups such as minorities. Over $400 million in Federal funds have been invested in this form of telecommunications infrastructure. Approximately 85% of PTFP funding has been devoted to the support of public broadcasting facilities.

Although public broadcasting stations produce an enormous amount of programming that is considered educational and cultural, PTFP has also set as a priority the funding of projects that meet the educational needs of specific or specialized audiences. During the past few years, the use of technologies such as Instructional Television Fixed Services and satellite delivery systems have been especially useful in delivering educational course work. As financial resources decrease across the United States and as technology has increased the ability to serve the needs of schools and colleges, educational institutions have realized the value of advanced telecommunications facilities. PTFP has funded satellite and terrestrial projects in Virginia, Iowa, Colorado, Michigan, Louisiana and South Carolina providing distance learning for diverse educational applications, such as K-12, community colleges, graduate engineering, agricultural information,and vocational education. Each of the projects takes advantage of technology to reduce the distance between teacher and student, to provide instruction that either would not be otherwise offered, or to be cost effective compared to other delivery methods.

PTFP also has as an important mission to increase public telecommunications services and facilities available to, operated by and owned by minorities and women. PTFP carries out this mission by ensuring that its program decisions take into account the impact of its funded projects on minorities and women and by actively recruiting applications from such groups throughout the United States. Recently the program has been successful in funding an island-wide project in Puerto Rico that will make available instructional services throughout this territory. PTFP recently has funded a Hispanic satellite radio network and can count among its successes the funding of several Native American projects.

In addition, PTFP has been an advocate of telecommunications services for the blind and the hearing impaired. Through such devices as radio reading services for the blind and captioning services for the deaf, the PTFP has been able to ensure that services for such populations have increased over the years. PTFP has been particularly instrumental in establishing radio reading services and expanding the services of such operations.

Funding from the PTFP appropriation also supports the activities of the PEACESAT program. The PEACESAT program provides educational, medical and cultural telecommunications services to over twenty isolated Pacific island nations that have limited access to modern telecommunications technologies. NTIA funding will support program development at PEACESAT headquarters at the University of Hawaii and operating costs for NOAA's GOES satellite. The PEACESAT project promotes U.S. interests in the Pacific island nations by providing telecommunications resources to support activities of other U.S. based projects, including many supported by the Federal government.

- Statement of Operating Objectives

NTIA's public telecommunications program objectives are to ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible, that a broad array of technologies is used to improve the effectiveness of distance learning, that minorities and women have increased access and control of public telecommunications, and that blind and hearing-impaired persons participate more fully in society through the use of telecommunications, as well as to monitor the over $200 million in grants currently within the 10-year Federal interest period. In FY 1994, NTIA will offer grants to states, localities and other non-commercial entities for planning and construction of public telecommunications infrastructures using a variety of technologies:

Public Radio and Television

Public television services include a vast array of life-long educational, informational and cultural programming which is available at no cost to people in their homes. During the school year, quality instruction is provided for in-school use, and enrichment programs for children are available throughout the day, from pre-school age programming such as Sesame Street through programs for adolescents. Adults are served through direct instruction programming for graduate level and continuing education, and with adult education programs such as NOVA and The Civil War. Adults are also served with consumer education, news, public affairs and cultural offerings. Low income families have the same opportunity as high income families to receive instruction and consumer information, and to experience a diverse selection of cultural and public affairs programming.

Public radio services are diverse and reflect the needs and interests of the communities served. While some public radio stations present culturally-based programming, others concentrate on news and public affairs, or are devoted to serving the needs of racial or ethnic minorities. Public radio stations that serve minority audiences often broadcast in Spanish or local Native American languages. Many communities have several public radio stations, each addressing a specific area of interest or community need.

PTFP funding is essential for the extension of public broadcasting services to people who are presently unserved. Equipment to transmit radio and television programs is very expensive. The establishment of a new, full-service public television station costs several million dollars, while a full-service public radio station can cost more than half a million dollars. Even a limited-service transmitter that only repeats the signal of an existing station can cost several hundred thousand dollars. PTFP support of projects to construct new public television and radio facilities is the major source of funds to extend these services to unserved communities. PTFP funds up to 75% of eligible project costs but does not support the operation of these facilities or other necessary costs of the project, such as building and studio renovation or site preparation. These costs must be absorbed by the local entity involved in the project.

PTFP support of transmission equipment replacement is vital for the future existence of the current system of public broadcasting in the United States. Continuation of transmission ability alone, however, is of limited service without the local productions that form the core of a station's programming which addresses the needs and interests of its local community. Production equipment replacement and improvement is a continuing need of public broadcasting. An important aspect of the PTFP is supporting the acquisition of equipment necessary to produce, record, and edit public radio and television programming. Given the difficulty that state and local governments and non-profit entities have in raising capital funds, most of this equipment cannot be purchased without the assistance of Federal funds.

Interactive Microwave

Interactive microwave systems are two-way, wireless, point-to-point systems that often are used to interconnect educational institutions. Educational institutions often use interactive microwave systems to share academic material or distribute classroom instruction to a remote learning center, resulting in more efficient instruction and saving significant costs as well as saving student and faculty travel time. Because of the point-to-point nature of microwave, this technology is most economic when service is required between a limited number of sites. PTFP funds microwave distribution equipment and studio production equipment for the establishment of interactive microwave projects. For example, PTFP has funded a statewide, interactive microwave system interconnecting colleges and school districts throughout the state of Utah. The EdNet system, operated by the University of Utah, provides interactive video instruction throughout the state. Many of the state's colleges and school districts have their own video classroom origination facilities for full interaction in the system. The system can provide for regional interexchange as well as statewide services. Interactive microwave systems are also used for governmental public hearings and to exchange computer data and other information between participating sites.

Instructional Television Fixed Service (ITFS)

The Federal Communications Commission has set aside frequencies for local school systems or colleges to use to deliver interactive instruction to many locations. This technology is Instructional Television Fixed Service (ITFS), which uses wireless point-to-multipoint technology to deliver in-classroom instruction. Because of ITFS's relatively low-cost and non-sophisticated technology, many educational institutions operate systems of four or more ITFS channels, thereby gaining the ability to serve many grade and subject levels. Many schools, community learning centers, and businesses can receive programming from a single ITFS transmission site. ITFS systems can be expanded easily, but all receiving sites must be in the line-of-sight of an ITFS transmitter, and ITFS systems can be interconnected to interactive microwave, satellites or fiber optic technology to expand the services available. PTFP funds ITFS transmission systems, production facilities and talk-back systems for placement at schools. PTFP recently funded the Community Telecommunications Network project of Detroit, Michigan, which provided a technical operations center for a consortium of seven regional educational institutions which operate 18 ITFS channels in the Detroit metropolitan area.

Satellite Delivery

Communications satellites are increasingly being used to distribute instructional materials to students located across large geographical areas. Using satellite technology, educational institutions distribute academic courses, continuing education, and important and timely teleconferences to students, businesses, and other organizations. Communications satellites are particularly useful when an educational institution needs to serve large numbers of sites or when users are located across wide areas. Small numbers of students in individual locations can be aggregated and economically served by a single satellite delivered program. In order to use satellite technology, academic institutions require uplink terminals to send programming to the satellite and user sites need downlink terminals to receive the programming. PTFP funds both satellite uplinks for the distribution of programming on a regional, statewide, or national level and downlink receive terminals for receipt of information from either PTFP-supported uplinks or other uplinks. PTFP supported downlinks often can be used to receive programming from many satellite-distributed services and are, therefore, a very efficient telecommunications technology. The Agricultural Satellite (AgSat) project PTFP supported involves 40 land grant institutions in 38 states and now has access to nearly 1,000 downlinks across the country for use in sharing agricultural programming, courses, and teleconferences.

Fiber optic cable and other digital technologies

The advent of digital technology creates new opportunities for governments and other non-profit entities. Digital technology on fiber optic cable provides broadband capabilities for the distribution of audio, video, and high-speed data. PTFP is supporting the planning efforts of a consortium of universities in the Pittsburgh area that will assemble, operate, and maintain a broadband telecommunications network for education and research, using fiber optic cable and other technologies. Digital technology is also useful for digital compressed video to increase the capacity of satellite communications. For example, more than 40 U.S. colleges and universities participate in the National Technological University (NTU) project. NTU provides graduate level and continuing education for engineers at more than 300 work locations nationwide and more than 500 academic courses. Through the use of digital compressed video, which provides the capability of simultaneously distributing eight different courses on a single satellite channel, NTU distributes 21,000 hours of programming by satellite each year.

Technologies to serve the visual and hearing impaired

Public broadcasting has long been in the forefront of providing service to the hearing and visually impaired. PTFP will support the establishment of audio reading services for the blind, using television's Second Audio Program channel as well as FM radio's Subsidiary Communications Authorization channel. Video-captioning equipment is provided by PTFP so the hearing impaired may fully participate in television programs. PTFP supports the expansion of these technologies as an important service that public broadcasting provides to many citizens of the country.

- Measures of Performance

The PTFP is a competitive grant program and the mix of projects funded depends on the nature and the competitiveness of the proposals submitted. All grants awarded support PTFP's goals to extend public broadcast signals to uncovered areas, to expand the variety and the reach of public telecommunications services, and to increase the number of public telecommunications services and facilities available to, operated by and owned by minorities and women.

Exhibit 16

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase (Decrease)
11 Personnel compensation					
11.1 Full-time permanent	796	1,016	749	749	0
11.3 Other than full-time permanent	99	52	68	68	0
11.5 Other personnel compensation	8	10	5	5	0
11.9 Total personnel compensation	903	1,078	822	822	0
12.1 Civilian personnel Benefits	159	105	245	245	0
21 Travel and transportation of persons	56	94	90	90	0
22 Transportation of things	1	3	4	4	0
23.1 Rental payments to GSA	87	68	133	133	0
23.3 Commun., util., misc. charges	34	22	52	52	0
24 Printing and reproduction	52	25	41	41	0
25 Other services	426	435	684	684	0
26 Supplies and materials	14	17	12	12	0
31 Equipment	2	7	12	12	0
41 Grants, subsidies and contributions	21,545	20,104	18,541	18,541	0
TOTAL OBLIGATIONS	23,279	21,958	20,636	20,636	0
Personnel Data					
Direct:					
Total number of full-time permanent positions	15	45	15	15	0
Total compensable workyears:					
Full-time equivalent employment	15	30	15	15	0
Full-time equivalent of overtime and holiday hours	0	0	0	0	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11 Personnel compensation				
11.1 Full-time permanent				
Executive level		0	0	0
Senior executive service	0	107	107	0
General schedule	0	642	642	0
Subtotal	0	749	749	0
11.3 Other than full-time permanent				
General schedule		68	68	0
Subtotal	0	68	68	0
11.5 Other personnel compensation				
Overtime		0	0	0
Cash awards		5	5	0
Subtotal	0	5	5	0
11.9 Total personnel compensation	0	822	822	0
12.1 Civilian personnel benefits				
Civil service retirement	0	11	11	0
Federal employees' retirement	0	88	88	0
Thrift savings plan	0	20	20	0
Federal insurance contribution act	0	49	49	0
Health insurance	0	74	74	0
Life insurance	0	3	3	0
Employees' compensation fund	0	0	0	0
Other		0	0	0
Subtotal	0	245	245	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
21 Travel and transportation of persons				
Common carrier	0	20	20	0
Per diem/actual	0	70	70	0
Other	0	0	0	0
Subtotal	0	90	90	0
22 Transportation of things	0	4	4	0
23.1 Rental payments to GSA	0	133	133	0
23.3 Communications, utilities and miscellaneous charges				
Rental of ADP equipment		0	0	0
Rental of office copying equipment		5	5	0
Other equipment rental		0	0	0
Federal telecommunications system	0	10	10	0
Other telecommunications services	0	19	19	0
Postal Service by USPS	0	18	18	0
Other		0	0	0
Subtotal	0	52	52	0
24 Printing and reproduction				
[Payments to WCF]	0	41	41	0
Boulder printing	0	0	0	0
Subtotal	0	41	41	0
25 Other services				
Training:				
Office of personnel management	0	5	5	0
Other	0	5	5	0
Other federal agencies:				
National Oceanic and Atmospheric Admin. – Cross Services		0	0	0
National Institute of Standards and Tech. – Cross Services	0	0	0	0
National Institute of Standards and Tech. – Acctg Services	0	18	18	0
Other agencies	0	533	533	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
Maintenance of equipment	0	0	0	0
GSA reimbursable services		0	0	0
Payments to WCF	0	57	57	0
Transfer to GA		0	0	0
Other	(91)	66	66	0
Subtotal	(91)	684	684	0
26 Supplies and materials				
Office supplies	0	6	6	0
ADP supplies	0	6	6	0
Subtotal	0	12	12	0
31 Equipment				
ADP equipment	0	6	6	0
Equipment depreciation	0	0	0	0
Other	0	6	6	0
Subtotal	0	12	12	0
41 Grants, subsidies and contributions	(593)	18541	18541	0
99 Subtotal, Direct Obligations	(684)	20,636	20,636	0
Reimbursable Obligations	0	0	0	0
TOTAL OBLIGATIONS	(684)	20,636	20,636	0

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
APPROPRIATIONS LANGUAGE AND CODE CITATIONS:

For grants authorized by section 392 of the Communications Act of 1934, as amended, $20,636,000, to remain available until expended as authorized by section 391 of said Act, as amended: Provided, That not to exceed $1,800,000 shall be available for program administration as authorized by section 391 of the Communications Act of 1934, as amended: Provided further, That notwithstanding the provisions of section 391 of the Communications Act of 1934, as amended, the prior year unobligated balances may be made available for grants for projects for which applications have been submitted and approved during any fiscal year: Provided further, That notwithstanding the provisions of sections 391 and 392 of the Communications Act, as amended, not to exceed $400,000 appropriated in this paragraph shall be available for the Pan-Pacific Educational and Cultural Experiments by Satellite program (PEACESAT): Provided further, That $250,000 shall be available for the American Indian Higher Education Consortium for utilization of telecommunications technologies.

47 U.S.C. § 305
47 U.S.C. § 391
47 U.S.C. § 701, et. seq., §§ 721, 744
47 U.S.C. § 901

47 U.S.C. § 305 authorizes the President to assign frequencies for U.S. government radio stations. Certain functions related to this authority were delegated to the Department of Commerce by Executive Order 12046.

47 U.S.C. § 391 authorizes the Secretary of Commerce to use appropriated funds for grants and administrative support of the Public Telecommunications Facilities Grant Program.

47 U.S.C. § 701 et. seq., particularly §§ 721 and 744 authorize the President to perform certain functions related to the planning and development of a national program for the establishment and operation of a commercial communications satellite system.

Public Law 102-538,1 to be codified in 47 U.S. C § 901, assigns NTIA responsibility for administration of the Public Telecommunications Facilities and Pan-Pacific Educational & Cultural Experiments by Satellite (PEACESAT) Program.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
CONSULTING AND RELATED SERVICES
(Dollar amounts in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$ 48	$ 46	$ 44
Management and professional services	.....	.....	.....
Special studies and analyses	.....	.....	.....
Management and support services for research and development	.....	.....	.....
Total	$ 48	$ 46	$ 44

Consulting services: The Public Telecommunications Facilities Grant Program utilizes consultants to review and evaluate grant applications.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Dollar amounts in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	15	17	40	18
Audiovisual products	0	0	0	0
Total	$ 15	$ 17	$ 40	$ 18

The Public Telecommunications Facilities Program (PTFP) utilizes pamphlets to provide grant application guidelines and reporting requirements.

Department of Commerce
National Telecommunications and Information Administration
Public Telecommunications Facilities, Planning and Construction
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Salary	$104,000	$107,300	$107,300
Average GS/GM Grade	12.0	12.8	12.8
Average GS/GM Salary	$47,475	$48,099	$49,157

Exhibit 5

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget	1	1,000	1	2,880
	Appropriation, 1993	1	1,000	1	2,880
	less: Obligations from prior years		0		(1,880)
	plus: 1994 Adjustments to base		0		0
	1994 base	1	1,000	1	1,000
	plus 1994 program changes	0	0	0	0
	1994 estimate	1	1,000	1	1,000

	Comparison by activity/subactivity, with subtotals by activity		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA-96	Children's Educational Television											
	(a) Grants....................	Pos/BA	0	1,866	0	763	0	763	0	763	0	0
		FTE/Obl.	0	0	0	2,591	0	763	0	763	0	0
	(b) Program Management	Pos/BA	1	134	1	237	1	237	1	237	0	0
		FTE/Obl.	1	120	1	289	1	237	1	237	0	0
	Subtotal..................	Pos/BA	1	2,000	1	1,000	1	1,000	1	1,000	0	0
		FTE/Obl.	1	120	1	2,880	1	1,000	1	1,000	0	0
	Adjustments for:											
	Recoveries											
	Unobligated balance, start of year			0		(1,880)						
	Unobligated balance transfered											
	Unobligated balance, end of year			1,880								
	Unobligated balance expiring											
	Financing from transfers:											
	Transfers from other accounts	Pos/BA	0	0	0	0	0	0	0	0	0	0
	Transfers to other accounts	Pos/BA	0	0	0	0	0	0	0	0	0	0
	Appropriation	Pos/BA	1	2,000	1	1,000	1	1,000	1	1,000	0	0

Exhibit 7

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Total Obligations	120	2,880	1,000	1,000	0
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non–Federal sources	0	0	0	0	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	0	(1,880)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	1,880	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	2,000	1,000	1,000	1,000	0
Financing:					
Transfer to other accounts	0	0	0	0	0
Transfer from other accounts	0	0	0	0	0
Appropriation	2,000	1,000	1,000	1,000	0

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity/subactivity, with subtotals by activity		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Children's Educational Television											
(a) Grants....................	Pos/BA	0	1,866	0	763	0	763	0	763	0	0
	FTE/Obl.	0	0	0	2,591	0	763	0	763	0	0
(b) Program Management	Pos/BA	1	134	0	237	0	237	0	237	0	0
	FTE/Obl.	1	120	1	289	1	237	1	237	0	0
Subtotal..................	Pos/BA	1	2,000	0	1,000	0	1,000	0	1,000	0	0
	FTE/Obl.	1	120	1	2,880	1	1,000	1	1,000	0	0

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television

Justification of Program and Performance

Activity: **Endowment for Children's Educational Television**
Subactivity: **Endowment for Children's Educational Television**

STATEMENT OF PURPOSE AND NEED

Television currently lacks sufficient programming directed towards improving the fundamental intellectual skills of children. The Children's Television Act of 1990 represents an attempt to increase the number of educational television programs available to our Nation's children and to improve the quality of such programming. Congress and the Administration recognize that there is currently a lack of financial incentives to create and air high-quality children's educational television. This is because such programming is often extremely expensive to produce. The National Endowment for Children's Educational Television (NECET) will create a growing pool of high-quality programming appropriate for children's audiences and available at affordable costs.

Goal Statement

To increase the pool of high-quality television programming aimed at improving the fundamental intellectual skills of our Nation's children. To ensure that the programming produced will have the widest possible distribution including such media as over-the-air broadcasting, cable television systems, interactive video disks, and video cassettes.

Proposed Legislation

The Children's Television Act of 1990, Public Law No. 101-437, 104 Stat. 996 (1990) (codified at 47 U.S.C. 394 (1991)) provides NTIA the authority to administer the NECET. NTIA may submit certain technical amendments to the statute to allow for easier distribution of the programming produced with funding authorized by this Act.

Base Program

- Explanation and Justification

The NECET awards grants to support the creation and production of television programming specifically directed toward the development of children's fundamental intellectual skills. In doing this, the NECET efforts are intended to supplement the children's educational programming funded by other governmental entities.

The Children's Television Act of 1990 stipulates that NECET-funded programming for the first two years following project completion may be offered for distribution only to public television stations. During this period, however, the programming may be distributed through other media not involving broadcast or cablecast, e.g., computer interactive systems or video cassettes. After the initial two-year period, NECET-funded programs are to be made available to commercial media as well, including not only commercial broadcast television networks and stations, but also cable television networks and systems. The Children's Television Act of 1990 authorizes the Secretary of Commerce, under certain circumstances, to modify some aspects of these distribution requirements.

The NECET legislation indicates that NECET-funded programming should receive the broadest possible distribution, and should ensure that adequate financial incentives are in place to encourage that goal. In awarding grants, the Endowment may support all the varied tasks associated with the production of children's television programming. This includes, but is not limited to, preparing scripts, performing research of children's needs, initiating new productions, and completing productions for which substantial funding is already in place.

The NECET also has established a statutorily directed ten member Advisory Council on Children's Educational Television which advises the Secretary of Commerce on matters directly related to the administration of the NECET. The Council is composed of individuals with experience in the field of children's television programming, research and other related fields.

In Fiscal Year 1993, the NECET established three major objectives to be used in awarding funds during the Fiscal Year 1993 grant award period.

Objective One: To improve the fundamental intellectual skills of children through the vehicle of television programming.

For the purposes of the program, this objective refers to the development of those skills which enable children to address the problems posed by the modern world. Such skills might be basic educative skills (e.g., reading, writing and arithmetic), or they might consist of more advanced capabilities (e.g., problem-solving and cognitive recognition abilities). In addition, applicants are encouraged to incorporate pro-social behavior and relationships in their projects within the context of these skills.

Objective Two: To the extent feasible, support the development of programming for children aged 6 to 8.

Although there is a need for high-quality educational programming for children of all ages, the NECET has concluded that the six-to-eight year old child is currently the most underserved by educational television and deserves special consideration for this first grant round. The 1990 U.S. Census indicates that there are 10,732,061 children in this age group.

Objective Three: To consider a broad range of subject areas for funding.

While the NECET is concentrating on the production of programming for children aged 6-8, the program is nonetheless imposing no limits on the scope of the proposals that may be submitted for funding consideration

NTIA anticipates that in FY 1993, the NECET will fund up to ten awards, depending on the nature of the projects and the need of the recipients, and the awards are anticipated to range from $10,000 to $1 million. NTIA may award funds up to 75% of eligible costs. Due to the limitation of available funding, however, applicants will be encouraged to provide as much outside funding as is feasible.

The Fiscal Year 1994 base program includes follow-on activities from the Fiscal Year 1993 effort relating to the production of the children's television programs funded in Fiscal Year 1993. NECET will ensure that the programs produced meet the highest standard of quality and that there is every opportunity to distribute the program.

NECET will review current research in the area of children's television production and will make recommendations as to possible future programming choices. NECET staff will keep informed of all relevant developments in the area of children's television programming and the development of intellectual skills. NECET will coordinate its activities with other organizations to ensure that the programs produced meet the most effective approach to programming.

In Fiscal Year 1994, it is anticipated that the NECET will review the objectives of the program and modify its current objectives to take into account the most pressing needs of children. The experience gained from the first year of programming will be used to further promote the interest of children.

- Statement of Operating Objectives

NECET program objectives are: to ensure that the children of this country have available to them a pool of television programming that improves fundamental intellectual skills; to ensure that the programming produced has the widest possible distribution; to ensure that the programming produced has sufficient entertainment value to encourage the largest possible audience; and to ensure that sufficient research is conducted to improve television programming available to children in the future.

In FY 1994, the NECET will provide funding to producers of children's programming that is intended to air first on public television and that will also include other means of distribution. One million dollars will be available for the production of television programming and for the administration of the NECET. It is anticipated that this amount of funding will allow the NECET to make one award for contribution to a series of children's programs or to fund a few programs that are less in duration. In FY 1993, the NECET will carefully balance the need to fund additional new programming with the needs to provide additional funding to continue series provided funds.

In addition, the NECET will monitor the results of the $3 million in funded FY 1993 projects to ensure that those projects are meeting the objectives outlined in the project award proposals. It is anticipated that during Fiscal Year 1994, some productions will be available for distribution on over-the-air broadcast television. It is also anticipated that the NECET will have completed a survey of children's television needs and will be able to make recommendations for future directions.

- Measures of Performance

NECET is a competitive grant program. The mix of projects it funds in any given year depends on the nature and the competitiveness of the proposals submitted. NECET seeks to increase the pool of programs that will be available to children 16 years of age and younger. Measures of performance will be how many programs are produced and whether these programs have lasting positive effect, the number of times that an NECET funded program is aired, how many children view the program, how intellectual skills are improved, and how the Endowment encourages the use of such programs in a wide variety of media.

During Fiscal Years 1993 and 1994, programs will begin to be produced and aired. Measures as to their effectiveness will not yet be available. There may be preliminary findings from test audiences or from limited productions that will have aired during this period, but these measures will not be conclusive as to the overall effectiveness of the program. During Fiscal Year 1995 and beyond, it is anticipated that the program will be able to adopt specific measures that will track the effectiveness of the program.

Exhibit 16

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase (Decrease)
11 Personnel compensation					
11.1 Full-time permanent	51	210	67	67	0
11.3 Other than full-time permanent	31	0	0	0	0
11.5 Other personnel compensation	0	0	0	0	0
11.9 Total personnel compensation	82	210	67	67	0
12.1 Civilian personnel Benefits	14	17	20	20	0
21 Travel and transportation of persons	5	45	25	25	0
22 Transportation of things	0	0	1	1	0
23.1 Rental payments to GSA	7	0	9	9	0
23.3 Commun., util., misc. charges	2	0	4	4	0
24 Printing and reproduction	9	10	15	15	0
25 Other services	0	0	92	92	0
26 Supplies and materials	1	0	2	2	0
31 Equipment	0	7	2	2	0
41 Grants, subsidies and contributions	0	2,591	763	763	0
TOTAL OBLIGATIONS	120	2,880	1,000	1,000	0
Personnel Data					
Direct:					
Total number of full-time permanent positions	1	1	1	1	0
Total compensable workyears:					
Full-time equivalent employment	1	1	1	1	0
Full-time equivalent of overtime and holiday hours	0	0	0	0	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11 Personnel compensation				
11.1 Full-time permanent				
Executive level		0	0	0
Senior executive service	0	0	0	0
General schedule	0	67	67	0
Subtotal	0	67	67	0
11.3 Other than full-time permanent				
General schedule		0	0	0
Subtotal	0	0	0	0
11.5 Other personnel compensation				
Overtime		0	0	0
Cash awards		0	0	0
Subtotal	0	0	0	0
11.9 Total personnel compensation	0	67	67	0
12.1 Civilian personnel benefits				
Civil service retirement	0	1	1	0
Federal employees' retirement	0	7	7	0
Thrift savings plan	0	2	2	0
Federal insurance contribution act	0	4	4	0
Health insurance	0	6	6	0
Life insurance	0	0	0	0
Employees' compensation fund	0	0	0	0
Other		0	0	0
Subtotal	0	20	20	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
21 Travel and transportation of persons				
Common carrier	0	10	10	0
Per diem/actual	0	15	15	0
Other	0	0	0	0
Subtotal	0	25	25	0
22 Transportation of things	0	1	1	0
23.1 Rental payments to GSA	0	9	9	0
23.3 Communications, utilities and miscellaneous charges				
Rental of ADP equipment		0	0	0
Rental of office copying equipment		0	0	0
Other equipment rental		0	0	0
Federal telecommunications system	0	1	1	0
Other telecommunications services	0	1	1	0
Postal Service by USPS	0	2	2	0
Other		0	0	0
Subtotal	0	4	4	0
24 Printing and reproduction				
[Payments to WCF]	0	15	15	0
Boulder printing	0	0	0	0
Subtotal	0	15	15	0
25 Other services				
Training:				
Office of personnel management	0	2	2	0
Other	0	2	2	0
Other federal agencies:				
National Oceanic and Atmospheric Admin. – Cross Services		0	0	0
National Institute of Standards and Tech. – Cross Services	0	0	0	0
National Institute of Standards and Tech. – Acctg Services	0	2	2	0
Other agencies	0	0	0	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
Maintenance of equipment	0	0	0	0
GSA reimbursable services		0	0	0
Payments to WCF	0	4	4	0
Transfer to GA		0	0	0
Other	0	82	82	0
Subtotal	0	92	92	0
26 Supplies and materials				
Office supplies	0	1	1	0
ADP supplies	0	1	1	0
Subtotal	0	2	2	0
31 Equipment				
ADP equipment	0	2	2	0
Equipment depreciation		0	0	0
Other	0	0	0	0
Subtotal	0	2	2	0
41 Grants, subsidies and contributions	0	763	763	0
99 Subtotal, Direct Obligations	0	1,000	1,000	0
Reimbursable Obligations	0	0	0	0
TOTAL OBLIGATIONS	0	1,000	1,000	0

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
APPROPRIATIONS LANGUAGE AND CODE CITATIONS:

For expenses necessary to carry out the provisions of the National Endowment for Children's Educational Television Act of 1990, title II of Public Law 101-437, including costs for contracts, grants and administrative expenses, $1,000,000, to remain available until expended.

47 U.S.C. § 394
47 U.S.C. § 901

47 U.S.C. § 394 authorizes the Secretary of Commerce to administer the National Endowment for Children's Educational Television.

Public Law 102-538, to be codified in 47 U.S.C § 901 assigns NTIA responsibility for administration of the National Endowment for Children's Educational Television Program.

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
CONSULTING AND RELATED SERVICES
(Dollar amounts in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$.....	$.....	$ 53
Management and professional services	.....	.....	.....
Special studies and analyses	.....	.....	.....
Management and support services for research and development	.....	.....	.....
Total	$.....	$	$ 53

Consulting services: The National Endowment for Children's Educational Television program will use consultants to review and evaluate grant applications.

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Dollar amounts in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	0	0	10	10
Audiovisual products	0	0	0	0
Total	$ 0	$ 0	$ 10	$ 10

The National Endowment for Children's Educational Television utilizes pamphlets to provide grant application guidelines and reporting requirements.

Department of Commerce
National Telecommunications and Information Administration
Endowment for Children's Educational Television
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Salary	$ 0	$ 0	$ 0
Average GS/GM Grade	13.0	13.0	15.0
Average GS/GM Salary	$50,830	$ 50,830	$66,609

Exhibit 5

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Appropriation, 1993	0	0	0	0
	plus: 1994 Adjustments to base	0	0	0	0
	1994 base	0	0	0	0
	plus 1994 Investment	14	51,000	14	51,000
	1994 estimate	14	51,000	14	51,000

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Comparison by activity/subactivity, with subtotals by activity		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA – 112	National Information Infrastructure (a) Grants..................	FTE/Obl.	0	0	0	0	0	0	0	48,500	0	48,500
	(b) Program Management	FTE/Obl.	0	0	0	0	0	0	14	2,500	14	2,500
	Total.................	FTE/Obl.	0	0	0	0	0	0	14	51,000	14	51,000
	Adjustments for:											
	Recoveries											
	Unobligated balance, start of year											
	Unobligated balance transfered											
	Unobligated balance, end of year											
	Unobligated balance expiring											
	Financing from transfers:											
	Transfers from other accounts	Pos/BA	0	0	0	0	0	0	0	0	0	0
	Transfers to other accounts	Pos/BA	0	0	0	0	0	0	0	0	0	0
	Appropriation	Pos/BA	0	0	0	0	0	0	14	51,000	14	51,000

Exhibit 7

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Total Obligations	0	0	0	51,000	51,000
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non–Federal sources	0	0	0	0	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	0	0	0	51,000	51,000
Financing:					
Transfer to other accounts	0	0	0	0	0
Transfer from other accounts	0	0	0	0	0
Appropriation	0	0	0	51,000	51,000

Exhibit 10

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity/subactivity, with subtotals by activity		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Information Infrastructure											
(a) Grants....................	Pos/BA	0	0	0	0	0	0	0	48,500	0	48,500
	FTE/Obl.	0	0	0	0	0	0	0	48,500	0	48,500
(b) Program Management	Pos/BA	0	0	0	0	0	0	14	2,500	14	2,500
	FTE/Obl.	0	0	0	0	0	0	14	2,500	14	2,500
Subtotal..................	Pos/BA	0	0	0	0	0	0	14	51,000	14	51,000
	FTE/Obl.	0	0	0	0	0	0	14	51,000	14	51,000

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
INCREASE FOR 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase	
	FTE	Amount	FTE	Amount	FTE	Amount
Information Infrastructure Grants	0	$ 0	14	$51,000	+14	+$51,000

National Information Infrastructure (+14 FTE, +$51,000) The Administration has proposed the development of a National Information Infrastructure (NII), which will ultimately connect the nation's businesses, residences, schools, health care facilities, and other public information and social service providers through a broadband interactive telecommunications networks. A key ingredient to successful implementation of the NII is to provide all Americans access to the benefits of the NII. Public service entities need to develop the capabilities that will enable them to connect into the NII to take full advantage of increasingly-sophisticated telecommunications and information technologies. NTIA funding to assist states, local governments, universities and school systems, hospitals and other health care providers, and other entities in purchasing equipment and in undertaking planning related to telecommunications infrastructure development is necessary for the establishment of new systems, enhancement of existing telecommunications networks, and interconnection among existing systems. Advanced telecommunications systems will in turn help to improve education at all levels, improve the delivery of health care (particularly to rural areas), and allow greater access for ordinary citizens to information resources throughout the country.

- Program Change and Explanation

The Administration has called for the development of a national broadband, interactive information infrastructure capable of transporting large quantities of data at high speed. Such "information superhighways" will pay enormous dividends to both the nations's economic competitiveness and the quality of life of our citizens. The Administration proposes that $51 million be made available to the Department of Commerce in 1994 for grants to states, local governments, universities, school systems, hospitals and other health care providers, and public service institutions to interconnect with the developing national information infrastructure. Between 1995 and 1998, $150 million annually would be made available for these purposes. The Administration initiative gives the Department of Commerce's NTIA responsibility to manage this program. NTIA's extensive expertise in broadband digital services and radio-based technologies, knowledge of the telecommunications market and regulatory environment, and experience administering the PTFP program enable NTIA to initiate and manage efficiently a telecommunications infrastructure grant program of this magnitude. These highways will eventually allow all citizens, businesses, and public service institutions to take advantage of the dramatic increase in the capabilities of telecommunications and information processing technologies.

The NII program is a key part of an overall Administrative program in the technology area designed to ensure that the United States enters the next century ready to compete in the global economy. The Federal commitment in the development of an information infrastructure will provide incentives (directly through matching grant requirements and indirectly through demonstrations of technology and applications) for other public and non-profit institutions to make additional investments for facilities that complement the projects funded under this program. Projects will be funded that provide the basis for connecting schools, libraries, health care facilities and other social and community service with interactive data, voice, and video telecommunications capabilities. These projects will take full advantage of the technical advances that are impacting network designs, equipment configurations, and service options. Substantial system growth beyond that possible through direct Federal investment alone will result through the leveraging of Federal funds.

Federal funding will function as a catalyst for private investment. Over the past ten years, much has changed in telecommunications technology. In that period of time, such devices as personal computers, cellular telephones, compact discs, VCRs, answering machines, fax machines, computer modems and other data communications devices, and sophisticated telephone sets have become part of the fabric of American life. In the future, it is expected that American public institutions and private citizens will have access to an even broader array of technologies and that the use of these technologies for accessing, processing, and communicating information will have an even more dramatic and positive effect on the quality of life of our citizens.

Lack of access to telecommunications infrastructures denies public service agencies the benefits of these new technologies. New telecommunications capabilities would particularly benefit educational entities. An advanced NII will significantly enhance opportunities for distance learning. Schools at all levels would be able to deliver courses cost-effectively and on a large scale to remote learning centers. ("Remote" in this context might mean anything from a few miles from the main campus to a video classroom across the country.) With distance learning, students do not have to travel long distances to get to major campuses, and teachers are not required to travel extensively to get to various remote learning centers. With distance learning, entire curricula (e.g., a master's degree program) may easily be produced at a major campus and be received simultaneously by large classes of students at multiple locations. The same is true with job training and professional education. Telecommunications technology allows such course work to be delivered to employees at their work site, thus obviating the need for time-consuming and, all too often, needless loss of work hours with the resultant decline in productivity.

The recent development of interactive, broadband technologies have created significant new opportunities to make even greater use of telecommunications in enhancing the effectiveness of education on the local, regional, and national levels. For example, such technologies can enhance distance learning by allowing a much greater degree of interactivity through voice, data, and video communications that replicate quite closely the experience of teachers and students actually being in the same classroom. They also can permit students to interact with multimedia databases in preparing for classes or doing research.

Health care services also would derive many benefits from interconnection to telecommunications and information networks for many of the same reasons as education. Medical personnel at remote sites (e.g., Indian reservation health clinics, rural hospitals) could receive in-service training and professional certification courses in a convenient and timely way. Interconnection of hospitals and community clinics will permit medical and biological data to be available to authorized health care providers anywhere. This will enable access by health care professionals to the most up-to-date patient data. High-resolution x-rays and similar diagnostic information can be accurately and reliably transmitted over advanced networks. Medical personnel can use interactive, multimedia telemedicine technologies to collaborate and consult over long distances bringing experts and specialists to patients no matter where the patient is located. Interactive imaging and modeling can be used to create accurate 3D models of patient's organs that will lead to improved and safer surgical procedures.

In FY 1994, NTIA proposes to establish a program that will provide states, local governments, universities and school systems, hospitals and other health care providers with the financial support to enable them to take advantage of advanced telecommunications infrastructure technologies. The scope of this program will include telecommunications services for education, health care, public information (e.g., electronic libraries), and other social and community service needs. NTIA proposes an initiative that would, beginning in FY 1994 and extending through FY 1998, invest over $600 million in grant award projects supporting both planning and facilities construction or acquisition. NTIA expects that planning projects funded will lead directly to infrastructure construction applications. The planning will include the development of engineering studies and completion of Federal Communications Commission applications that may be required so construction of the proposed systems can promptly begin as soon as funds are available. Infrastructure construction grants should enable schools, hospitals, libraries, etc., to begin realizing the diverse benefits of advanced telecommunications technology. Entities already utilizing telecommunications will achieve interconnection with similar organizations to form new infrastructures. "Last mile" interconnections with already-existing "backbone" systems will take place across the nation.

NTIA will support a variety of information technologies in this program including interactive microwave, satellite, fiber optics, and Instructional Television Fixed Service (ITFS), among others. Applicants will be free to propose use of whatever technologies they believe will best assist them in establishing a national, regional, statewide, or local segments of the eventual nationwide information infrastructure. The program will allow for grants for locally-based projects, statewide projects, and joint ventures. The latter would most likely be regional in scope.

Exhibit 14

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Information Infrastructure
Subactivity: National Information Infrastructure
Program Change: Investment Program: National Information Infrastructure

Personnel Title:	Grade	Number	Annual Salary	Total Salaries
Associate Administrator	SES	1	92,900	92,900
Telecommunications Manager	15	2	66,609	133,218
Telecommunications Specialist	14	1	56,627	56,627
Telecommunications Specialist	13	3	47,920	143,760
Electronics Engineer	12	5	40,298	201,490
Telecommunications Specialist	9	1	27,789	27,789
Secretary	8	1	25,169	25,169
Subtotal		14		680,953
Total full-time permanent		14		680,953
1994 Pay Adjustment				0
				680,953

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	14
Other than full-time permanent	0
Total	14
Authorized Positions:	
Full-time permanent	14
Other than full-time permanent	0
Total	14

Exhibit 15

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollar amounts in thousands)

Activity: National Information Infrastructure
Subactivity: National Information Infrastructure
Program change: Investment Program: National Information Infrastructure

Object Class	1994 Increase/ (Decrease)
11 Personnel compensation	
11.1 Full-time permanent	681
11.3 Other than full-time permanent	
11.5 Other personnel compensation	
11.9 Total personnel compensation	681
12.1 Civilian personnel Benefits	203
21 Travel and transportation of persons	200
22 Transportation of things	10
23.1 Rental payments to GSA	124
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	48
24 Printing and reproduction	50
25 Other services	1,024
26 Supplies and materials	50
31 Equipment	110
41 Grants, sibsidies and contributions	48,500
99 Direct obligations	51,000

Exhibit 16

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase (Decrease)
11 Personnel compensation					
11.1 Full-time permanent	0	0	0	681	681
11.3 Other than full-time permanent	0	0	0	0	0
11.5 Other personnel compensation	0	0	0	0	0
11.9 Total personnel compensation	0	0	0	681	681
12.1 Civilian personnel Benefits	0	0	0	203	203
21 Travel and transportation of persons	0	0	0	200	200
22 Transportation of things	0	0	0	10	10
23.1 Rental payments to GSA	0	0	0	124	124
23.3 Commun., util., misc. charges	0	0	0	48	48
24 Printing and reproduction	0	0	0	50	50
25 Other services	0	0	0	1,024	1,024
26 Supplies and materials	0	0	0	50	50
31 Equipment	0	0	0	110	110
41 Grants, subsidies and contributions	0	0	0	48,500	48,500
TOTAL OBLIGATIONS	0	0	0	51,000	51,000
Personnel Data					
Direct:					
Total number of full-time permanent positions	0	0	0	14	14
Total compensable workyears:					
Full-time equivalent employment	0	0	0	14	14
Full-time equivalent of overtime and holiday hours	0	0	0	0	0

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11 Personnel compensation				
11.1 Full-time permanent				
Executive level		0	0	0
Senior executive service	0	0	0	0
General schedule	0	0	681	681
Subtotal	0	0	681	681
11.3 Other than full-time permanent				
General schedule		0	0	0
Subtotal	0	0	0	0
11.5 Other personnel compensation				
Overtime		0	0	0
Cash awards		0	0	0
Subtotal	0	0	0	0
11.9 Total personnel compensation	0	0	681	681
12.1 Civilian personnel benefits				
Civil service retirement	0	0	0	0
Federal employees' retirement	0	0	76	76
Thrift savings plan	0	0	16	16
Federal insurance contribution act	0	0	43	43
Health insurance	0	0	61	61
Life insurance	0	0	4	4
Employees' compensation fund	0	0	3	3
Other		0	0	0
Subtotal	0	0	203	203

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
21 Travel and transportation of persons				
Common carrier		0	51	51
Per diem/actual	0	0	138	138
Other		0	11	11
Subtotal	0	0	200	200
22 Transportation of things		0	10	10
23.1 Rental payments to GSA	0	0	124	124
23.3 Communications, utilities and miscellaneous charges				
Rental of ADP equipment		0	0	0
Rental of office copying equipment		0	0	0
Other equipment rental		0	0	0
Federal telecommunications system		0	9	9
Other telecommunications services	0	0	22	22
Postal Service by USPS		0	17	17
Other		0	0	0
Subtotal	0	0	48	48
24 Printing and reproduction				
[Payments to WCF]		0	50	50
Boulder printing	0	0	0	0
Subtotal	0	0	50	50
25 Other services				
Training:				
Office of personnel management		0	22	22
Other		0	34	34
Other federal agencies:				
National Oceanic and Atmospheric Admin. – Cross Services		0	0	0
National Institute of Standards and Tech. – Cross Services	0	0	0	0
National Institute of Standards and Tech. – Acctg Services		0	15	15
Other agencies		0	370	370

Exhibit 17

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
Maintenance of equipment		0	3	3
GSA reimbursable services		0	0	0
Payments to WCF	0	0	53	53
Transfer to GA		0	0	0
Other		0	527	527
Subtotal	0	0	1,024	1,024
26 Supplies and materials				
Office supplies	0	0	30	30
ADP supplies	0	0	20	20
Subtotal	0	0	50	50
31 Equipment				
ADP equipment		0	42	42
Equipment depreciation		0	0	0
Other		0	68	68
Subtotal	0	0	110	110
41 Grants, subsidies and contributions			48,500	48,500
99 Subtotal, Direct Obligations	0	0	51,000	51,000
Reimbursable Obligations	0	0	0	0
TOTAL OBLIGATIONS	0	0	51,000	51,000

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
APPROPRIATIONS LANGUAGE AND CODE CITATIONS:

For grants for construction projects and for planning projects related to the development of a national information infrastructure for the provision of educational, cultural, health care, public information, or other social services, $51,000,000, to remain available until expended, of which not to exceed $2,500,000 shall be for program administration. (Authorizing legislation to be proposed.)

The investment request is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package.

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$.....	$	$ 527
Management and professional services	.....	.....	.....
Special studies and analyses	.....	.....	.....
Management and support services for research and development	.....	.....	.....
Total	$	$	$ 527

Consulting services: The National Information Infrastructure Grant Program will use consultants to review and evaluate grant applications.

Department of Commerce
National Telecommunications and Information Administration
National Information Infrastructure

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS

(Dollar amounts in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	0	0	0	17
Audiovisual products	0	0	0	0
Total	$ 0	$ 0	$ 0	$ 17

The National Information Infrastructure Grant Program will utilize pamphlets to provide grant application guidelines and reporting requirements.

Department of Commerce
National Telecommunications and Information Administration1
National Information Infrastructure
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Salary	$ 0	$ 0	$ 92,900
Average GS/GM Grade	0	0	12.3
Average GS/GM Salary	$ 0	$ 0	$ 45,476

Mr. SMITH of Iowa. Testifying in support of this request is the Acting Assistant Secretary for Communications and Information, Thomas J. Sugrue. Mr. Sugrue, you may proceed now with your statement.

Do you have a statement?

Mr. SUGRUE. I do. We have a fuller statement to submit in writing, and I have an abbreviated version if I could give that orally this morning.

Mr. SMITH of Iowa. Good.

OPENING STATEMENT

Mr. SUGRUE. Good morning, Mr. Chairman and Mr. Skaggs. With me today at the table is Dennis Connors, our Associate Administrator in the Office of Telecommunications Applications; the PTFP, which includes Public Telecommunications Facilities Program, and Dr. Charles Rush, our Chief Scientist.

Thank you for the opportunity to discuss the 1994 budget request of the NTIA. NTIA is requesting $21.9 million for its Salaries and Expenses appropriation, $20.6 million for the Public Telecommunications Facilities, Planning and Construction appropriation, $1 million for the Endowment for Children's Educational Television appropriation, and $51 million for the National Information Infrastructure appropriation.

NTIA, as the President's principal advisor on telecommunications policy and spectrum management, has a broad mission. Within the base program, NTIA is responsible for developing and presenting domestic and international telecommunications and information policies for the executive branch, for ensuring the efficient and effective use of the Federal radio spectrum, for performing state-of-the-art telecommunications research, engineering and planning, and for administering the Federal program that supports public telecommunications facilities.

The telecommunications and information industries are key to the economic vitality of the United States and the quality of life of our citizens. Through its initiatives, NTIA is in a unique position to enhance significantly the ability of U.S. companies to compete in the global marketplace, and at the same time, help to bring the benefits of an advanced telecommunications infrastructure to all Americans. The initiatives for Fiscal Year 1994 fully support the Administration's goals and NTIA's mission by building on the demonstrated capabilities and responsibilities of NTIA.

NATIONAL INFORMATION INFRASTRUCTURE (NII)

Now, I would like to turn to our major program increase for 1994.

The Administration has proposed the development of a National Information Infrastructure, or NII, that can serve the needs of all Americans. In 1994, NTIA will participate in this program in two ways: first, by implementing the NII grant program; and second, by conducting related initiatives reflected in the Salaries and Expenses appropriation. A key ingredient of the NII is a telecommunications and information infrastructure that provides educators, health care, and other social service providers with access to the benefits of the NII. Accordingly, one initiative which will be administered by NTIA, will provide grants to assist States, local governments, universities and school systems, hospitals and other health care providers, and other entities to purchase equipment and undertake the planning needed to assure effective development of the telecommunications infrastructure. NTIA is requesting $51 million for this effort, and we envision a variety of projects that will be supported that provide the capability to connect to existing networks, and enhance networks that are currently operational, and permit users to interconnect among different networks.

INTERNATIONAL CONFERENCE PLANNING

Our second initiative deals with critical international telecommunications conference planning and participation. During the next few years, the number of international telecommunications conferences addressing radio spectrum allocation, standard-setting related to advanced infrastructure design and network operation, and regulatory reform will increase substantially. These activities play a critical role in meeting U.S. national objectives for the use of telecommunications and for ensuring the competitiveness of U.S. industry in the world telecommunications marketplace.

In order for the United States to continue to be effective and achieve its objectives at these conferences, NTIA is requesting $1.4 million to enhance its planning for, and participation in, these conferences and negotiations. Radio spectrum must be allocated internationally and standards must be set in ways that ensure both the competitiveness of U.S. industry and ease in interconnecting advanced telecommunications networks as the information infrastructure expands from the domestic market to the global market.

TELECOMMUNICATIONS RESEARCH AND DEVELOPMENT

Third and, closely related to our NII initiative is the technical work that NTIA undertakes in telecommunications research and development. Telecommunications technologies are profoundly affecting the evolution of the infrastructure, the same infrastructure that is the foundation for the information superhighways of the future. Relying primarily on our Institute for Telecommunication Sciences in Boulder, Colorado, NTIA is requesting $700,000 to enhance its efforts to develop performance standards for network planning and operation. Standards for voice, video, and data need to be developed that assure interoperability and interconnection of networks that are key to the sound development of an NII.

ENHANCE INVOLVEMENT IN THE NATIONAL RESEARCH AND EDUCATION NETWORK

The fourth of the NTIA initiatives relating directly to infrastructure and network development is our proposal to enhance NTIA involvement in the National Research and Education Network, or NREN, for which NTIA is requesting $500,000. NREN is a high-speed data network linking supercomputers and databases in government, industry and academic research institutions. For two reasons, we feel that it is very important for NTIA to become more involved in the Federal agency coordination for NREN development.

First, NREN is evolving from a specialized network for research purposes to an important component of the national telecommunications infrastructure. Policy issues dealing with the role of NREN and the overall national telecommunications infrastructure are increasing in importance.

Second, as part of the President's NII initiative, NTIA will be providing funds for educational institutions and others to interconnect to advanced telecommunications networks, such as NREN and the existing Internet.

Legislation has been passed by the House, and is pending in the Senate, that would transfer a block of Federal spectrum, 200 megahertz to the FCC for subsequent distribution to the private sector. The Administration supports this reallocation plan, which will make scarce radio spectrum available for new radio-based services and technologies. Many of these technologies, such as personal communications services, are expected to play key roles in the development of the future infrastructure, particularly for services requiring mobility and portability.

The Administration has also proposed the use of competitive bidding to assign commercial spectrum licenses, and as part of this initiative, NTIA would study various approaches toward designing competitive bidding systems for assigning such licenses. NTIA is requesting $400,000 to undertake these efforts.

PUBLIC TELECOMMUNICATIONS FACILITIES, PLANNING AND CONSTRUCTION (PTFP)

Finally, I would like also to briefly mention two other elements of our proposed program for 1994. For the first time since Fiscal Year 1981, NTIA's budget includes funding for the PTFP. The requested funding level of $20.6 million is consistent with the funding appropriated in Fiscal Year 1993. In 1994, PTFP will continue to assist through matching grants, in the planning and construction of public broadcasting facilities and to extend and maintain the high-quality delivery of public broadcasting services to as many citizens of the United States as possible.

NATIONAL ENDOWMENT FOR CHILDREN'S EDUCATIONAL TELEVISION

Also, for the first time, NTIA's budget includes funding to continue support for the National Endowment for Children's Educational Television. Our $1 million request will ensure that efforts begun in 1992 and 1993 to develop high quality educational programming are appropriate for children's audiences. NTIA plans to award our first grants for the Endowment by the end of this fiscal year.

Mr. Chairman, the efforts just described are some of the highlights of NTIA's activities. We urge the subcommittee to support NTIA's budget proposals for FY 1994, and I look forward to working with this Committee as we strive to provide the benefits of advanced telecommunications to all Americans and enhance the competitiveness of the U.S. telecommunications industry.

I would be pleased to answer any questions you may have, and thank you again for the opportunity to discuss NTIA's plans.

[The prepared statement and biography of Mr. Sugrue follows:]

Mr. Chairman and Members of the Committee:

Thank you for this opportunity to discuss the 1994 budget request of the National Telecommunications and Information Administration (NTIA).

1994 Budget Request

NTIA is requesting $21.9 million for its Salaries and Expenses appropriation, $20.6 million for the Public Telecommunications Facilities, Planning and Construction appropriation, $1 million for the Endowment for Children's Educational Television appropriation, and $51 million for the National Information Infrastructure appropriation.

NTIA'S MISSION

NTIA, as the President's principal advisor on telecommunications policy and spectrum management, has a broad mission. Within the base program, NTIA is responsible for developing and presenting domestic and international telecommunications and information policies for the Executive Branch, for ensuring the efficient and effective use of the Federal radio spectrum, for performing state-of-the-art telecommunications research, engineering, and planning, and for administering the Federal program that supports public telecommunications facilities.

SUMMARY OF PROPOSED INCREASES

The telecommunications and information industries are key to the economic vitality of the United States and the quality of life of our citizens. Through its initiatives, NTIA is in a unique position to enhance significantly the ability of U.S. companies to compete in the global marketplace, and, at the same time, help to bring the benefits of an advanced telecommunications infrastructure to all Americans. The initiatives for FY 1994 fully support the Administration's goals and NTIA's mission, by building on the demonstrated capabilities and responsibilities of NTIA.

Now I'd like to turn to our major program increases for 1994.

National Information Infrastructure

The Administration has proposed the development of a National Information Infrastructure (NII) that can serve the needs of all Americans. As part of the Administration's FY 1994 investment package, NTIA will participate in this program in two ways: 1) by implementing the NII grant program; and 2) by conducting related initiatives in the Salaries and Expenses appropriation. A key ingredient of the NII is a telecommunications and information infrastructure that permits educators, health care, and other social service providers access to the benefits of the NII. Accordingly, one part of the NII initiative, which will be administered by NTIA, will provide grants to assist states, local governments, universities and school systems, hospitals and other health care providers, and other entities to purchase equipment and undertake the planning needed to ensure effective development of the telecommunications infrastructure. NTIA is requesting $51 million for this effort, and we envision a variety of projects will be supported that provide the capability to connect to existing networks, enhance telecommunications networks that are currently operational, and permit users to interconnect among different networks. These projects will lead to advanced telecommunications systems that will in turn help to improve education at all levels, to improved delivery of health care (particularly in rural areas), and to greater access to the benefits of the NII.

For example, schools in the K-12 range in a given community could be connected to the current national backbone network, Internet, through a gateway that currently serves the needs of colleges and universities in the same area. Through distance learning based on telecommunications, students in colleges or high schools in remote areas could take advantage of specialized courses (e.g., in languages or sciences) available only at major campuses or other central locations.

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Critical International Telecommunications Conference Planning and Participation

During the next few years, the number of international telecommunications conferences addressing radio spectrum allocation, standard-setting related to advanced infrastructure design and network operation, and regulatory reform will increase substantially. These activities, including world administrative radio conferences (WARCs), bilateral and multilateral negotiations, and standards development, play a critical role in meeting U.S. national objectives for the use of telecommunications and for ensuring the competitiveness of U.S. industry in the world telecommunications marketplace. In order for the United States to continue to be effective and achieve its objectives at these conferences, NTIA is requesting $1.4 million to enhance its planning for, and participation in, these conferences and negotiations. Positions put forward by the U.S. government, and thoroughly coordinated with the private sector, are essential to promoting U.S. global competitiveness in the development of advanced telecommunications technologies and services and the manufacture and sale of telecommunications and related equipment. Radio spectrum must be allocated and standards must be set in ways that ensure ease in interconnecting advanced telecommunications networks as the information infrastructure expands from the domestic market to the global market.

Telecommunications Infrastructure Research and Development

Closely related to our NII initiative is the technical work that NTIA undertakes in telecommunications research and development. Telecommunications is being driven by rapid advances in technology: we are moving from an analog world to a digital one; narrowband systems are being replaced by broadband systems; and advances in spectrum-based technologies are permitting ever increasing mobility of services. These developments are profoundly affecting the evolution of the telecommunications infrastructure -- the same infrastructure that is the foundation for the information superhighways of the future. Relying primarily on our Institute for Telecommunication Sciences in Boulder, Colorado, NTIA is requesting $700 thousand to enhance its efforts to develop performance standards for network planning and operation. Standards for voice, video, and data need to be developed that assure interoperability and interconnection of networks, thereby facilitating the implementation of efficient, high-capacity communication systems that are key to the sound development of an NII.

National Research and Education Network Program

The fourth of the NTIA initiatives relating directly to infrastructure and network development is our proposal to enhance NTIA involvement in the National Research and Education Network (NREN) Program, for which NTIA is requesting

$500 thousand. NREN, which will build on the existing Internet, will be a high-speed data network linking supercomputers and databases of government, industry, and academic research institutions. For two reasons, we feel that it is very important for NTIA to become more involved in the Federal agency coordination for NREN development. First, NREN is evolving from a specialized network for research purposes to an important component of the national telecommunications infrastructure. As a result, policy issues dealing with the role of NREN and the overall national telecommunications infrastructure are increasing in importance. Second, as part of the President's NII initiative, NTIA will be providing funds for educational institutions and others to interconnect to advanced telecommunications networks, such as NREN and the existing Internet. Increased NTIA participation in NREN development would help make certain that the potential benefits of such interconnection is considered as NREN is designed.

Spectrum Reallocation

One of the components of the Administration's overall economic recovery plan for the nation is the transfer of a portion of Federal spectrum to the FCC. Legislation has been passed by the House, and is pending in the Senate, that would transfer 200 megahertz (MHz) of Federal spectrum to the FCC for subsequent distribution to the private sector. Under these legislative proposals to reallocate Federal spectrum, NTIA must analyze current frequency assignments and develop a plan to reallocate the spectrum to be transferred. During this process the private sector will be actively consulted and involved in special studies. The reallocation will make scarce radio spectrum available for new radio-based services and technologies. Many of these technologies, such as personal communications services, are expected to play key roles in the development of the future infrastructure, particularly for services requiring mobility and portability. The Administration has also proposed the use of competitive bidding to assign commercial spectrum licenses, and as part of this initiative, NTIA would study various approaches toward designing competitive bidding systems for assigning spectrum licenses. NTIA would also work with the FCC to develop ways to implement these important reforms. NTIA is requesting $400 thousand to undertake these efforts.

PUBLIC TELECOMMUNICATIONS FACILITIES

For the first time since FY 1981, NTIA's budget request includes funding the Public Telecommunications Facilities Program (PTFP). The requested funding level of $20.6 million is consistent with the funding appropriated in FY 1993. In FY 1994, PTFP will continue to assist, through matching grants, in the planning and construction of public broadcasting facilities and to extend delivery of public broadcasting services to as many citizens of the United States as possible. With the creation of the NII program, a portion of the PTFP funds which in the past have been awarded for infrastructure applications will now be available to support this traditional PTFP mission in the public broadcasting area.

ENDOWMENT FOR CHILDREN'S EDUCATIONAL TELEVISION

Also for the first time, NTIA's budget includes funding to continue support of the National Endowment for Children's Educational Television. Our $1 million request will ensure that efforts begun in 1992 and 1993 to develop high quality, educational programming are appropriate for children's audiences. NTIA plans to award our first grants for the NECET by the end of this fiscal year.

CONCLUSION

Mr. Chairman, the efforts just described are some of the highlights of NTIA's activities. We urge the Subcommittee to support NTIA's budget proposals for 1994. I look forward to working with this Committee as we strive to provide the benefits of advanced telecommunications to all Americans and enhance the competitiveness of the U.S. telecommunications industry. I would be pleased to answer any questions which you may have, and thank you again for this opportunity to discuss NTIA's plans with you.

THOMAS J. SUGRUE

Since July 1989, Mr. Sugrue has served as the Deputy Administrator of the National Telecommunications and Information Administration (NTIA), the Executive Branch communications policy agency, which is part of the Department of Commerce.

Prior to joining NTIA, Mr. Sugrue was Chief of the Policy Division in the Common Carrier Bureau of the Federal Communications Commission (FCC). Before joining the FCC, Mr. Sugrue was an attorney with the law firm of Wilmer, Cutler, and Pickering, a legal adviser with the Federal Trade Commission, and law clerk with the Supreme Court of Massachusetts.

Mr. Sugrue received his Bachelor of Science Degree in physics, magna cum laude, from Boston College in 1968. He received a Masters in Public Policy in 1975 from the John F. Kennedy School of Government of Harvard University and his J.D. degree, magna cum laude, from Harvard Law School in 1975.

NTIA VACANCIES

Mr. SMITH of Iowa. Now, what is the status of the new appointment for Assistant Secretary?

Mr. SUGRUE. Mr. Larry Irving, whose name has just been sent to Congress as the official nominee to be Assistant Secretary for NTIA, has not had a confirmation hearing. We are optimistic, though, one will be scheduled fairly soon.

1993 SUPPLEMENTAL AND 1994 BUDGET REQUEST

Mr. SMITH of Iowa. Now, in this stimulus bill, there is $64 million for NTIA. Assuming you don't get that, what does that do to your program?

Mr. SUGRUE. Well, it slows it down somewhat. That would have gotten it off to a fast start, and I think we could have used those funds very effectively.

Mr. SMITH of Iowa. Explain to us more precisely, what does it do? Does it not change the program, just set it back; and if so, how many months?

Mr. SUGRUE. We were planning to obligate that $64 million mostly by the end of this fiscal year, and if not, then shortly thereafter. That would have supported a mixture of both planning grants and construction grants. The planning grants would have provided a basis for those areas that have not really paid significant attention to how telecommunications could be used. There are quite a few projects that are fundable right now.

At the hearing on the supplemental package we discussed briefly the Iowa Communications Network, and the fact that that it is up and running and that there are a number of projects. We had a visit from some people in Iowa as to possible applications they might submit in the supplemental package. Now, that will obviously have to be put off. If the budget does pass sometime later in the summer or early in the fall, we would move very quickly, though, in initiating the program.

Mr. SMITH of Iowa. Does it change the program, or does it just set it back?

Mr. SUGRUE. It doesn't change the substance of the program. In addition to the $54 million for Fiscal Year 1994, the plan is to have increased amounts in out-years, up to $150 million.

NATIONAL INFORMATION INFRASTRUCTURE

Mr. SMITH of Iowa. Now, explain to me how we work in those programs like they have in Iowa, which has a considerable head start, compared to other programs. How does this all mesh?

Mr. SUGRUE. Well, some programs as I said, already could use funds for what we call construction; that is, actually building network facilities, hooking up right away. We have pending before us under the present PTFP program with about 70 applications for educational infrastructure, seeking about $30 million. Not all of those projects are fundable, but quite a few are very high quality and we will be looking to fund some of those out of the $20 million we have in the PTFP program. Obviously, those applications share that pool of $20 million with traditional PTFP public broadcasting applications. It is a very tough job to divide that limited amount of money among some very worthy applications.

Our plan for 1994 and beyond is to have two programs-one, the traditional PTFP that supports public broadcasting; and the other the infrastructure-related grants which, again, now share the same amount of money. The second pool would be extended not only to education, which it is now limited to, but health care and other social services. So we would anticipate going forward; with two projects: one dedicated to public broadcasting and one to the infrastructure types of projects.

Mr. SMITH of Iowa. Well, is it state-by-state—some States haven't even started.

Mr. SUGRUE. Right.

Mr. SMITH of Iowa. And some are pretty well along. How do you work this out so that it is a national program?

Mr. SUGRUE. We would in two ways, Mr. Chairman. One, in those areas in which they are not as far along, we would be looking to fund planning grants. We have authority now to fund planning grants, and that would be part of the new program as well. That provides a basis for how you would use telecommunications to develop-when I talk about planning, it is pretty detailed, coming up with exactly the types of facilities, how you use them, where you put them, how much they cost and so forth-that provides a basis then for seeking construction grants in later years. Some States, Iowa being one, are further along in terms of action. They have done all their planning. In Iowa, for example, there is a fiber-optic ring around the State; there is still need to connect individual schools and school systems into that ring, or colleges, community colleges and so forth.

Mr. SMITH of Iowa. Well, looking down the road several years then, do you visualize that we will have 50 State programs, or 50 separate programs? For example, let's take—I don't have any idea of what the situation is in Massachusetts and Rhode Island, but how can you have a separate State program?

Mr. SUGRUE. It is not just limited to State borders. We already fund regional and national programs. For example, we gave a grant last year to AGSAT, the Agriculture Satellite Communications Network that links agricultural colleges throughout the Nation; and that is done through a satellite link. This gets into different technologies.

One very good application of satellite technology is that it reaches the Nation as a whole. It puts down a footprint, as they call it, that covers a very wide area.

We have an application before us for the black college satellite network, which would reach colleges around the country with educational programming.

Mr. SMITH of Iowa. But they would be using some of the same equipment, wouldn't they? They would be using a State program?

Mr. SUGRUE. That is right. There will be an emphasis on ensuring that they have plans to interconnect with other networks.

In other words, we don't want to create little islands of telecommunications. That really would degrade the overall value of the program if everyone has their own little thing. So interconnection and interoperability are two things we will be looking for as we go forward with these applications.

FY 1994 BUDGET REQUEST TO OMB

Mr. SMITH of Iowa. Well, what was your request of OMB?

Mr. SUGRUE. Our original OMB request was $23,900,000, and we received back from OMB $94,500,000.

Mr. SMITH of Iowa. OK. Now, how does that compare to the national program that we are talking about? I mean, are we talking about taking 50 years to get there, or 10 years, or what, with these kinds of figures?

Mr. SUGRUE. We are doing pilot projects and demonstration projects. But in my view it is always going to be a little bit over the horizon with this technology. That is, we build the network with present capabilities and ones that are available; we try to push the technology out and get those facilities out there. The technology is moving so fast that I don't anticipate a slowdown 10 years from now. I think we will have the ability to do better 10 years from now.

Mr. SMITH of Iowa. Well, is this just a mere pittance that we are talking about, your appropriation and your effort compared to the national effort; or is this a major component?

Mr. SUGRUE. I think this is a major component. We aren't proposing to build the national infrastructure that will serve all homes, residences, and everywhere. The Government doing that would be inappropriate and impossible. The private sector investment is, we have estimated, to be about $50 billion a year in telecommunications infrastructure. It is comprised of telephone companies, long-distance companies, cable TV companies, cellular and other radio-based, putting the whole package together.

Mr. SMITH of Iowa. Well, then, our investment, the Federal investment is a mere pittance compared to the total picture. So how is it important, and why is it important?

Mr. SUGRUE. For two purposes. One, we think it will serve as a catalyst for private sector investment.

Mr. SMITH of Iowa. How?

Mr. SUGRUE. In a number of ways. One very direct way is the program does require matching funds. The present statute requires at least a 25 percent match; and as a matter of policy, we require 50 percent, except under limited special circumstances. A lot of the applications that come in either have State funding or contributions from a telephone company, or a cable company, who will contribute facilities to a school system, for example, to hook up. They will provide half the funding or in-kind contributions.

Second, as we build up the infrastructure for education, and health care, we are not proposing to put it out to all communities, and we think we will be able to show and demonstrate how this technology can serve people's needs and help create a demand for it.

Right now, there is sort of a chicken-and-egg problem. That is, the networks don't get built because the applications aren't there; the applications don't develop because the network isn't built. We are trying to break some of that and get the facilities out into the communities; and that will help drive demand for these services.

If the children at school are using, for example, computers hooked up to the Internet, there will be a greater demand to bring that type of capability to the home as well.

Finally, I would add, one part of the program is to get a set of government policies in place and activities that stimulate private sector investment. One thing we have been asked to do at NTIA, and we have undertaken, is to review the state of the regulatory and legal landscape for this industry—what is affecting investment, what is retarding it, what is promoting it, and to analyze what sort of reforms the administration might propose in this area.

Mr. SMITH of Iowa. Well, what will the private sector and the billions of dollars we are talking about do differently if we have this program than if we didn't have the program?

Mr. SUGRUE. I think a number of areas will be affected. One, it will provide an incentive to build out an infrastructure more quickly. For example, a digital network that aids computer communications, would be stimulated by a program like this in the school system, in the doctor's office or in the hospital where these types of facilities are available.

Mr. SMITH of Iowa. How do you stimulate that?

Mr. SUGRUE. Mainly, through the demand process and through the development of applications. Applications basically are how you use the network, the software types of things. I should add that the present administration's overall program does have three components to it of which our program is the third, the so-called "last mile" part. We are the ones who bring the interconnections out to the communities, the schools, hospitals and so forth.

The other two components of this initiative are the NREN, which is the high-speed, big-capacity, network-connecting supercomputers and research centers. In the lingo of the trade, the "gigabit networks". That is, billions of bits flowing per second. And the second part of the initiative is what I refer to as "applications," the development of the programs for health care, education, libraries, manufacturing. Without those things, again you can have the network, but you can't use it for things that are very useful.

Our part which the last-mile interconnection into those backbone networks that would permit the use of these applications by real people in real communities.

Mr. SMITH of Iowa. Well, we have Federal agencies that want to get on line, too. They are making applications into the State network. I mean the IRS, for example. They could use it and reduce personnel with their education programs, et cetera. So I can understand why some of the States want to get ahead of the other States.

But I am still not quite clear, we are talking about such a big thing here. We are talking about billions of dollars that are going to be invested in this area. The States are getting involved in a relatively small way, but in a bigger way than the Federal Government, and then we come along with a relatively small program. What are we talking about in the authorization bill? How much?

Mr. SUGRUE. We are talking about $650 million over five years.

Mr. SMITH of Iowa. So it is a mere pittance compared to the investment that is going to be made in this whole area, I mean, on a national basis. How is this $650 million going to change what they would have done without it, or how is it going to influence it for them to do something differently than they would have?

Mr. SUGRUE. Well, in two ways. Again our program is the third, and the smaller third of the overall initiative. The high-performance, computing part of the initiative, that I mentioned first, and then the applications actually involve more dollars than ours. So the overall for the five years is well into the billions of dollars.

Second, what would happen that wouldn't happen without this money are twofold. First, school systems are traditionally supported by government. Government funds the educational activities in our country both locally and on the Federal level. One concern we have had is that this is to be an infrastructure that reaches everyone, and not just an infrastructure that serves the super-high-tech big companies, the big users, and the affluent. We were looking for a way that we could bring the infrastructure out again to the common person.

As I said, funding for wiring up cities or whole communities, is probably not an appropriate role for government and unrealistic in terms of the amount of money it would take. We focused on education; we looked at how we can reach the common man and reach him quickly. Education, health care and other social services seem like the best way to go about it.

We think we can do a significant amount of work over the next five years and a significant amount of good in getting telecommunications out for those purposes. You are right, Mr. Chairman. There is continuing evolution in the telecommunications network anyway, and there will be evolution whether this program is here or not. On the other hand, I am not so sure it will reach everyone we are trying to reach in quite the way it would without this program.

Mr. SMITH of Iowa. Is the Federal effort then to try to get the program to reach people where there is no profit incentive to reach them?

Mr. SUGRUE. Yes that is one motivation.

I think it has two. One, as part of an overall program to stimulate technology, and again, part of that is done through the other parts of the overall NII program, not the NTIA part, but the NREN part that NSF is doing by pushing the envelope of technology, and developing the so-called "gigabit networks."

Mr. SMITH of Iowa. Have you had your authorization hearing?

Mr. SUGRUE. No.

Mr. SMITH of Iowa. What is the status of the authorization?

Mr. SUGRUE. We are going to need authorization for this program for 1994 in order to expand the program's coverage to health care as well as educational entities.

Mr. SMITH of Iowa. You haven't had hearings on it yet?

Mr. SUGRUE. No. But we are drafting legislation.

This will be a new program. The supplemental request was going to go through the traditional PTFP program which includes authority to fund educational programs.

We are now proposing a different program which would expand coverage to include health care.

Mr. SMITH of Iowa. Now, when will your proposed legislation be sent to Congress?

Mr. SUGRUE. Very shortly. It is just about completed at NTIA, and; will be circulating for Departmental and OMB review.

Mr. SMITH of Iowa. Is that going to the Science and Technology Committee?

Mr. SUGRUE. Telecommunications-Energy and Commerce.

Mr. SMITH of Iowa. It is all up to Energy and Commerce, or is it joint?

Mr. SUGRUE. No, it is just Energy and Commerce.

NATIONAL ENDOWMENT FOR CHILDREN'S EDUCATIONAL TV

Mr. SMITH of Iowa. I see. And the children's TV, is there going to be a new authorization on that?

Mr. SUGRUE. We are authorized for that through FY 1994.

Mr. SMITH of Iowa. Are you proposing a different authorization, or not?

Mr. SUGRUE. No, we are not. There is $6 million authorized for the Children's Endowment in FY 1994.

Mr. SMITH of Iowa. I see.

Mr. Rogers?

FY 1994 OMB REQUEST

Mr. ROGERS. How much did you request of OMB?

Mr. SUGRUE. $23.9 million. The difference between that and the $94.6 million in our 1994 budget request reflects a change in priorities and the new initiative from the new administration.

Mr. ROGERS. You can say that again. Can you help me go grocery shopping this afternoon? You get pretty good bargains.

Well, now, this additional money helps the budget request exceed the spending caps that we have, does it not?

Mr. SUGRUE. Well, I am aware of that, but I am not much more aware of it than just what you said, to summarize my knowledge of it.

Mr. ROGERS. Well, we have a unique situation here. I don't know how we are going to deal with this. The Clinton budget request exceeds the spending caps set in statute by the 1990 budget agreement. If we give you the additional $54 million, it means we have to find an offset elsewhere within our subcommittee's jurisdiction.

That is a hefty sum of money for our subcommittee to try to find, particularly with budgets that already have been squeezed in the last two or three years. How do you suggest we deal with this?

I understand the Clinton budget request would make these so-called investments available only if Congress passes a budget reconciliation act, raising the spending caps, which is unlikely to occur. We will have to find this money from some other account, because we will not have had the relief that supposedly the reconciliation bill will give us.

Do you have an answer for us?

Mr. SUGRUE. I don't have an answer for this, but I am sure there are some people in the Administration who have an answer.

Mr. Rogers. Well, unless the Chairman knows, I have not been given an answer from the Administration. It is a puzzle to me why OMB would do this to us.

Furthermore, I am not sure I exactly understand what it is you are requesting.

Assume I know nothing about telecommunications technology. Explain briefly this new proposal.

NATIONAL INFORMATION INFRASTRUCTURE

Mr. Sugrue. The new proposal is to fund school systems, hospitals, and similar social service providers to use telecommunications in their missions for education and health care purposes. The types of projects we would fund, for example, in education could include distance learning applications that are similar to those we fund now under the PTFP, only we could do a much more expanded program.

The Chairman was asking about $54 million or even $650 million being a drop in the bucket. Last year we funded $4 million out of our PTFP program for infrastructure projects. So what we are doing is literally a drop in the bucket. But nevertheless we get a lot of interest from school systems and others in seeking those funds.

One example might be, a small school system interested in taking Japanese. The school system cannot afford to hire a teacher to teach Japanese. However, there is a city 200 miles away in which the course is available. Right now if it is a high school student, there is no way of making that connection. If it is a college student, they might have to enroll in the school that is 200 miles away. Through telecommunications technology and a variety of technologies—satellite, microwave, fiber, broadcasting—that course, for example, could be made available to that rural area; and to rural areas, let's say, throughout the region. This application, distance learning, is the type of thing we are actually funding right now.

Mr. Rogers. This would all be by competitive grants.

Mr. Sugrue. Yes.

Mr. Rogers. What would the grant pay for? The infrastructure itself, the physical infrastructure, the hardware?

Mr. Sugrue. Yes, that is correct.

Mr. Rogers. Any software or training programs?

Mr. Sugrue. The present program is really focused on facilities. One thing we are deciding as we draft this legislation I was talking about is whether to expand it beyond facilities for hardware into software, and whether to include training. The legislation hasn't gone through all the clearance processes yet.

Our inclination is to try to expand it somewhat because of the feedback we are getting from some of our constituents, that some training and some initial operational costs might be appropriate and necessary.

Mr. Rogers. These would all be matching grants?

Mr. Sugrue. These would all be matching grants.

Mr. Rogers. Would they be 50-50?

Mr. SUGRUE. 50–50 is what we are thinking, correct. The planning grant also could be 100 percent Federal funds, and we often do that.

Mr. ROGERS. And who would be eligible to apply?

Mr. SUGRUE. Applicants could be State and local governments, counties, school systems, colleges, or universities. Often, in the distance learning field, we see a consortia of colleges, because they are trying to bring together different campuses.

In the expanded program we would see hospitals, other clinics, and libraries.

Mr. ROGERS. Are there private monies going into these types of facilities now?

Mr. SUGRUE. In the education area, most of those receiving funding are private schools, or colleges. There is not an extensive pool of private funds available for public education. Most of the funding comes out of our tax dollars.

This is also a way of more effectively using our tax dollars to deliver educational services to our citizens, in many cases.

Mr. ROGERS. You are not talking about a national information highway, or are you?

Mr. SUGRUE. Well, this would be part of it. We frankly stopped using the highway metaphor as much as was used initially, because it seemed to be spreading as much confusion as it was light at the time.

But if we use the highway metaphor, one thing we would be funding are the roads that go out to the communities that connect with the superhighways.

As you point out, it would be a grant program. It is not NTIA or other agencies of the U.S. Government going out and building the infrastructure and owning it. The applicants will contract with whoever they decide is best. It could be a telephone company, a cable company, a satellite provider or etc., and in a sense, the applicant will buy for the private sector the facilities they need for their own network capabilities.

Mr. ROGERS. Well, is this proposal a part of the national information highway's overall scheme?

Mr. SUGRUE. Yes, it is.

Mr. ROGERS. Now, where is that overall scheme being funded?

Mr. SUGRUE. It has these various components I referred to earlier, the high-performance computer initiative of which the National Research and Education Network (NREN), is a part. NSF has the lead in that, although other agencies are very involved, particularly those that have major research and computing facilities such as the Department of Energy, and NOAA in the Department of Commerce.

The applications component of the program hasn't been funded yet. There is legislation pending to do that, and that would go through various agencies that are being charged with developing these particular applications. NIST, examples of involved agencies are of the Department of Commerce in the manufacturing area, NSF together with NTIA for the education area; and HHS for health care.

Mr. ROGERS. Well, who in the government is leading this effort? Is it the President or Vice President?

Mr. SUGRUE. The President and the Vice President take the lead on this. The Office of Science and Technology (OSTP), as the President's advisor or science and technology is coordinating the government-wide initiative.

Mr. ROGERS. Is there anywhere outside the White House where it is being coordinated from?

Mr. SUGRUE. Well, there are a number of coordinating activities within the Federal Government. There is the so-called FCCSET Committee, which has a high-performance computing initiative component to it. We are working through that group.

We are going to develop one of our initiatives for NTIA to participate more actively in the Federal coordinating activities for information infrastructure.

Mr. ROGERS. Is there a detailed written proposal we could read that would give us an overall picture of this overall project?

Mr. MORAN. There was a Time Magazine article. I tried to learn from that, figuring that was something that maybe I could understand. Is that accurate?

Mr. SUGRUE. That is not a bad article.

The President's investment plan, *A Vision of Change for America,* describes the program. It is also presented in greater detail in "Technology for America's Economic Growth—A New Direction To Build Economic Strength." This article articulates the President's technology policy. The President and the Vice President have a technology paper.

Mr. ROGERS. Do you think we could get Time Magazine's reporter in here today?

Seriously, is there any publication that can help us understand how this proposal fits into the overall scheme, not just your part of it.

Mr. SUGRUE. Right. The President's Technology Initiative Report issued in February.

Mr. CONNORS. February 22nd, I think.

Mr. SUGRUE. That sets out the overall provision for technology and the overall information infrastructure component of that.

Mr. ROGERS. Is that a very big document?

Mr. SUGRUE. No, no. It is about 34 pages.

Mr. ROGERS. Can you provide the Committee with a copy for the record?

Mr. SUGRUE. Sure can. Will do.

[The information follows:]

Technology for America's Economic Growth, A New Direction to Build Economic Strength

President William J. Clinton
Vice President Albert Gore, Jr.

February 22, 1993

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Technology for America's Economic Growth: A New Direction to Build Economic Strength

A New Direction

Investing in technology is investing in America's future: a growing economy with more high-skill, high-wage jobs for American workers; a cleaner environment where energy efficiency increases profits and reduces pollution; a stronger, more competitive private sector able to maintain U.S. leadership in critical world markets; an educational system where every student is challenged; and an inspired scientific and technological research community focused on ensuring not just our national security but our very quality of life.

American technology must move in a new direction to build economic strength and spur economic growth. The traditional federal role in technology development has been limited to support of basic science and mission-oriented research in the Defense Department, NASA, and other agencies. This strategy was appropriate for a previous generation but not for today's profound challenges. We cannot rely on the serendipitous application of defense technology to the private sector. We must aim directly at these new challenges and focus our efforts on the new opportunities before us, recognizing that government can play a key role helping private firms develop and profit from innovations.

We must move in a new direction:

- Strengthening America's industrial competitiveness and creating jobs;
- Creating a business environment where technical innovation can flourish and where investment is attracted to new ideas;
- Ensuring the coordinated management of technology all across the government;
- Forging a closer working partnership among industry, federal and state governments, workers, and universities;
- Redirecting the focus of our national efforts toward technologies crucial to today's businesses and a growing economy, such as information and communication, flexible manufacturing, and environmental technologies; and,
- Reaffirming our commitment to basic science, the foundation on which all technical progress is ultimately built.

For the American People

Our most important measure of success will be our ability to make a difference in the lives of the American people, to harness technology so that it improves the quality of their lives and the economic strength of our nation.

We are moving in a new direction that recognizes the critical role technology must play in stimulating and sustaining the long-term economic growth that creates high-quality jobs and protects our environment.

We are moving in a new direction to create an educational and training system that challenges American workers to match their skills to the demands of a fast-paced economy and challenges our students to reach for resources beyond their classrooms.

We are moving in a new direction to dramatically improve our ability to transmit complicated information faster and further, to improve our transportation systems, our health care, our research efforts, and even the ability of our military to respond quickly and decisively to any threat to our nation's security.

In these times, technology matters as well to an efficient farm, food processing, and food retailing industry that delivers a variety of low-cost, wholesome foods; to a construction industry that builds high-quality, affordable housing; and to an energy sector that balances energy efficiency with clean, affordable and efficient energy sources.

New Criteria

We will hold ourselves to tough standards and clear vision. The best technology policy unleashes the creative energies of innovators throughout the economy by creating a market that rewards invention and enterprise. We are moving to accelerate the development of civilian technology with new criteria:

- Accelerating the development of technologies critical for long-term economic growth but not receiving adequate support from private firms, either because the returns are too distant or because the level of funding required is too great for individual firms to bear;

- Encouraging a pattern of business development that will likely result in stable, rewarding jobs for large numbers of workers;

- Accelerating the development of technologies that could increase productivity while reducing the burden of economic activity on the local, regional, or global environment;

- Improving the skills offered by American workers by increasing the productivity and the accessibility of education and training;

- Reflecting the real needs of American businesses as demonstrated by their willingness to share the cost of research or participate in the design of initiatives;

- Supporting communities or disadvantaged groups in the U.S. or abroad who have not enjoyed the benefits of technology-based economic growth;

- Contributing to U.S. access to foreign science and technology, enhancing cooperation on global problems or U.S. successes in technology-related foreign markets.

Reaching Our Technology Goals

The challenge we face demands that we set and keep focused on our goals:

- **LONG TERM ECONOMIC GROWTH THAT CREATES JOBS AND PROTECTS THE ENVIRONMENT**

- **A GOVERNMENT THAT IS MORE PRODUCTIVE AND MORE RESPONSIVE TO THE NEEDS OF ITS CITIZENS**

- **WORLD LEADERSHIP IN BASIC SCIENCE, MATHEMATICS, AND ENGINEERING.**

We have the means to stimulate innovations that will bring economic growth and help us reach our goals and other important objectives. Foremost is a sound fiscal policy that reduces the federal deficit and lowers interest rates. But that is not always enough. We must also turn to:

- Research and experimentation tax credits and other fiscal policies to create an environment conducive to innovation and investment;

- A trade policy that encourages open but fair trade;

- A regulatory policy that encourages innovation and achieves social objectives efficiently;

- Education and training programs to ensure continuous learning opportunities for all Americans;

- Support for private research and development through research partnerships and other mechanisms to accelerate technologies where market mechanisms do not adequately reflect the nation's return on the investment;

- Support for contract R & D centers and manufacturing extension centers that can give small businesses easy access to technical innovations and know-how;

- Support for a national telecommunications infrastructure and other information infrastructures critical for economic expansion;

- Department of Defense and other federal agency purchasing policies designed to foster early markets for innovative products and services that contribute to national goals;

- Strong and sustained support for basic science to protect the source of future innovations;

- International science and technology cooperative projects that enhance U.S. access to foreign sources of science and technology, contribute to the management of global problems, and provide the basis for marketing U.S. goods and services;

- Dual-use Defense Department research and development programs;

- National user facilities that make sophisticated research tools, such a synchrotron radiation and neutron beam tools, available to a variety of research organizations.

Managing Technology for Economic Growth

Redirecting America's programs in science and technology will require major changes in the way we manage our efforts. Tight management is essential to ensure the highest possible return our investments and to ensure that tax, regulatory and other efforts reinforce instead of frustrate our work.

We are making major changes:

- Working with Vice President Gore, a reinvigorated Office of Science and Technology Policy will lead in the development of science and technology policy and will use the Federal Coordinating Council on Science, Engineering, and Technology, along with other means, to coordinate the R & D programs of the federal agencies;

- The new National Economic Council will monitor the implementation of new policies and provide a forum for coordinating technology policy with the policies of the tax, trade, regulatory, economic development, and other economic sectors.

As we move from traditional, mission-oriented R & D to investments designed specifically to strengthen America's industrial competitiveness and create jobs, considerable care must be taken to set priorities. In many cases, it will be essential to require cost-sharing on the part of private partners. In all cases, it will be essential for our government to work closely with business and labor.

Our initiative in advanced manufacturing, for example, will not be successful without direct input from the private sector about which technical areas are most important. We will conduct a review of laws and regulations, such as the Federal Advisory Committee Act and conflict-of-interest regulations to determine whether changes are needed to increase government-industry communication and cooperation.

We also will work closely with Congress to prevent 'earmarking' of funds for science and technology. Peer review and merit-based competition are critical to the success of any science and technology policy.

Effective management of technology policy also requires an effective partnership between federal and state governments. The states have pioneered many valuable programs to accelerate technology development and commercialization. Our efforts should build on these programs.

And, every federal technology program, including those of long-standing, will be regularly evaluated against pre-established criteria to determine if they should remain part of a national program. Major changes facing our nation's economy demand a searching re-examination of technology programs, particularly now as we move toward new efforts and a new emphasis in our technology for America's economic growth.

Building America's Economic Strength: New Initiatives

The challenges we face -- from our competitors abroad and from our people at home -- demand dramatic innovation and bold action that will not just revive our economy now but also ensure our economic growth well into the future. Building America's economic strength through technology demands new initiatives that confront these challenges effectively, efficiently, and creatively.

- PERMANENT EXTENSION OF THE RESEARCH AND EXPERIMENTATION TAX CREDIT to sustain incentives for the R&E work so essential to new developments;

- INVESTMENT IN A NATIONAL INFORMATION INFRASTRUCTURE and establishment of a task force working with the private sector to design a national communications policy that will ensure rapid introduction of new communication technology;

- ACCELERATED INVESTMENT IN ADVANCED MANUFACTURING TECHNOLOGIES that promote U.S. industrial competitiveness and that build on, rather than minimize, worker skills;

- RE-ESTABLISHING TECHNOLOGICAL LEADERSHIP AND COMPETITIVENESS OF THE U.S. AUTOMOBILE INDUSTRY through a major new program to help the industry develop critical new technology that can all but eliminate the environmental hazards of automobile use and operate from domestically produced fuels and facilitate the development of a new generation of automobiles;

- IMPROVE TECHNOLOGY FOR EDUCATION AND TRAINING by supporting the development and introduction of computer and communications equipment and software that can increase the productivity of learning in formal school settings, a variety of business training facilities and in homes.

- INVESTMENTS IN ENERGY-EFFICIENT FEDERAL BUILDINGS to reduce wasteful energy expenses and encourage the adoption of innovative, energy-efficient technology.

GOAL: LONG-TERM ECONOMIC GROWTH THAT CREATES JOBS AND PROTECTS THE ENVIRONMENT

Technology is the engine of economic growth. In the United States, technological advance has been responsible for as much as two-thirds of productivity growth since the Depression. Breakthroughs such as the transistor, computers, recombinant DNA and synthetic materials have created entire new industries and millions of high-paying jobs.

International competitiveness depends less and less on traditional factors such as access to natural resources and cheap labor. Instead, the new growth industries are knowledge based. They depend on the continuous generation of new technological innovations and the rapid transformation of these innovations into commercial products the world wants to buy. That requires a talented and adaptive work force capable of using the latest technologies and reaching ever-higher levels of productivity.

Modern production systems also make much more efficient use of energy and materials. Advances in technology can lead to enormous reductions in the environmental emissions associated with automobiles, buildings, and factories. And because pollution always signals inefficiencies and, because wasteful energy costs raise the price of doing business, these technology advances can also lead to increased profits.

We can promote technology as a catalyst for economic growth by:

- directly supporting the development, commercialization, and deployment of new technology;
- fiscal and regulatory policies that indirectly promote these activities;
- investment in education and training; and,
- support for critical transportation and communication infrastructures.

Technology Development, Commercialization and Use

Since World War II, the federal government's de facto technology policy has consisted of support for basic science and mission-oriented R&D -- largely defense technology. Compared to Japan and our other competitors, support for commercial technology has been minimal in the U.S.. Instead, the U.S. government has relied on its investments in defense and space to trickle down to civilian industry.

Although that approach to commercial technology may have made sense in an earlier era, when U.S. firms dominated world markets, it is no longer adequate. The nation urgently needs improved strategies for government/industry cooperation in the support of industrial technology. These new approaches need not jeopardize agency missions: In many technology areas, missions of the agencies coincide with commercial interests or can be accomplished better through close cooperation with industry.

This Administration will modify the ways federal agencies do business to encourage cooperative work with industry in areas of mutual interest. President Eisenhower undertook a similar policy change in 1954, when he issued an executive order directing federal agencies to support basic research. This new policy will result in significantly more federal R&D resources going to (pre-competitive) projects of commercial relevance. It will also result in federal programs that go beyond R&D, where appropriate, to promote the broad application of new technology and know-how.

R&D. At the level of technology development, the fundamental mechanism for carrying out this new approach is the cost-shared R&D partnership between government and industry. All federal R&D agencies (including the nation's 726 federal laboratories) will be encouraged to act as partners with industry wherever possible. In this way, federal investments can be managed to benefit both government's needs and the needs of U.S. businesses.

This reorientation is particularly urgent for the Department of Defense, which accounts for 56 percent of all federal R&D. A significant portion of DoD's research and development budget is already focused on dual-use projects -- particularly projects supported by the Defense Advanced Research Projects Agency (DARPA). Since a growing number of defense needs can be met most efficiently by commercial products and technology in the years ahead, this fraction will increase. DoD is developing a strategy to improve the integration of defense and commercial technology development.

All federal support for technology development is being reviewed to ensure that research priorities are in line with contemporary needs of industry and to ensure that strategies for working with industry are consistent.

To strengthen industry-government cooperation and to provide more federal support for commercial R&D:

- **The ratio of civilian and dual-use R&D to purely military R&D is significantly higher in President Clinton's economic plan.** This is a first step toward balancing funding levels for these two categories. In 1993, the civilian share of the total federal R&D budget was approximately 41% . Under President Clinton's plan, the civilian share will be more than 50% by 1998. Total spending for civilian R&D will rise from $27.9 billion to 36.6 billion during this period.

- **The Commerce Department's Advanced Technology Program is expanded significantly.** Established in 1990, the ATP shares the costs of industry-defined and industry-led projects selected through merit-based competitions.

- **The Defense Advanced Research Projects Agency (DARPA) will be renamed the Advanced Research Projects Agency (ARPA)** -- as the agency was known before 1972. The ARPA program in dual use will be expanded in ways that increase the likelihood that defense research can lead to civilian product opportunities.

- **New Department of Energy programs designed to increase the productivity of energy use in industry, transportation, and buildings as well as renewable energy programs** will ensure that the goals of environmental protection are fully consistent with other business objectives. DoE, working with other agencies, will encourage industry R&D consortia in an effort directed at reducing pollution and manufacturing waste.

- **Manufacturing R&D will receive particular attention from ATP, ARPA and other federal agencies.** SEMATECH, an industry consortium created to develop semiconductor manufacturing technology, will receive continued matching funds from the Department of Defense in FY94. This consortium can serve as a model for federal consortia funded to advance other critical technologies. Programs will be encouraged in the development of a new automobile, new construction technologies, intelligent control and sensor technologies, rapid prototyping, and environmentally-conscious manufacturing.

- **All laboratories managed by the Department of Energy, NASA, and the Department of Defense that can make a productive contribution to the civilian economy will be reviewed with the aim of devoting at least 10-20 percent of their budgets to R&D partnerships with industry.**

- **Agencies will make it a priority to remove obstacles to Cooperative R&D Agreements (CRADAs) and to facilitate industry-lab cooperation through other means.**

- **The Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) will be strengthened.** Initiatives are currently underway in the following six areas: improving our understanding of the climate system, advanced supercomputers and computer networks, math and science education, materials processing, biotechnology, and advanced manufacturing.

Commercialization. Although U.S. firms remain relatively strong in the invention of new technologies, foreign competitors are often first to commercialize and bring new products to market. The reorientation of federal R&D can play an important role. Cooperative research is a powerful way to get technology and know-how into the hands of businesses that are in a position to put them quickly to work. The tax, regulatory, and other reforms described later also play a key role by creating a favorable investment environment for innovation. But in many cases additional programs are needed, such as:

- **Regional Technology Alliances** explicitly designed to promote the commercialization and application of critical technologies in which there are regional clusters of strength to encourage firms and research institutions within a particular region to exchange information, share and develop technology, and develop new products and markets.

- **Agile Manufacturing programs** expanded to allow temporary networks of complementary firms to come together quickly to exploit fast-changing market opportunities. These programs support the development and dissemination of information technology and technical standards to make such networks possible.

Access and Use. In addition to support for the development and adoption of new technologies, programs are needed to ensure that all American businesses have easy access to existing technology and best practices. The Agriculture Department has historically devoted half of its R&D budget to the active dissemination of research results. The extraordinary productivity gains in American farming throughout this century owe a great deal to the close links between individual farmers and county extension agents.

American manufacturing also needs an effective system. New manufacturing technologies and approaches are available that can lead to dramatic improvements in product quality, cost, and time-to-market. But relatively few U.S. businesses have taken advantage of these new technologies and best practices. The problem is particularly acute among the 360,000 small and medium-sized manufacturers, many of whom are still using 1950s technology.

Workers should play a significant role in the use and spread of manufacturing technology. Workplace experience makes clear that new technologies are implemented most effectively when the knowledge and concerns of workers are included in the process.

To enhance the use of and access to technology, we will:

- **Create a national network of manufacturing extension centers.** Existing state and federal manufacturing extension centers managed through the Department of Commerce provide assistance to a small number of businesses, but service must be greatly expanded to give all businesses access to the technologies, testing facilities, and training programs they need. Federal funds (to be matched by state and local governments) will support and build on existing state, local, and university programs, with the goal of creating a nation-wide network of extension centers.

- **Expand the Manufacturing Experts in the Classroom program** to support manufacturing specialists from industry and labor teaching in technical and community colleges. The goal is to strengthen the capacity of such institutions to serve regional manufacturing firms.

- **Work through the Department of Labor to assist US firms in implementing the principles of high performance work organization.** DOL will coordinate assistance in workforce literacy, technical training, labor management relations, and the restructuring of management and work processes. Implementation will occur in part through the network of manufacturing extension centers.

A World-Class Business Environment For Innovation and Private Sector Investment

Increasing investment in civilian technologies is only one element of a strategy to restore America's industrial and technological leadership, and to create high-wage, high-skill jobs. The United States must also ensure that its tax, trade, regulatory and procurement policies encourage private sector investment and innovation. In a global where capital and technology are increasingly mobile, the United States must make sure that it has the best environment for private sector investment and job creation.

To improve the environment for private sector investment and create jobs, we will:

1. **Make Permanent the Research and Experimentation (R&E) Tax Credit:** The need for additional U.S. investment in R&D is clear. Currently, the United States invests 1.9 percent of GDP in non-defense R&D, as compared to 3.0 percent in Japan and 2.7 percent in West Germany. We will increase private R&E expenditures by making the Research and Experimentation tax credit permanent. In the past, the effectiveness of this credit has been undermined by a series of six and nine-month temporary extensions. The credit cannot induce additional R&E expenditures unless its future availability is known when the businesses are planning R&E projects and projecting costs. R&E activity, by its nature, is long term and businesses should be able to plan their research activity knowing that the credit will be available when the research is actually undertaken. Thus if the R&E credit is to have the intended incentive effect, it should be permanent.

2. **Create incentives for long-term investments in small businesses:** The Administration will send legislation to Congress designed to provide incentives for those who make high-risk, long-term venture capital investments in startups and other small enterprises. These companies are the major source of job creation, economic growth, and technological dynamism in our economy.

3. **Create incentives for investment in equipment:** Currently, America's chief economic competitors are investing twice as much in plant and equipment (as a percentage of GDP) as the United States. Furthermore, studies show a high correlation between investment in new equipment and productivity -- since new technologies are often embodied in capital equipment. To stimulate additional investment in equipment, the Administration will propose a temporary incremental investment tax credit for large businesses and a permanent credit for small businesses.

4. **Reform antitrust laws to permit joint production ventures:** The Administration will forward legislation to Congress which would extend the National Cooperative Research Act of 1984 to cover joint production ventures. Increasingly, the escalating cost of state-of-the-art manufacturing facilities will require firms to share costs and pool risks.

5. **Ensure that U.S. trade policy strengthens high technology industries:** To remain competitive, America's high-tech industries need full access to overseas markets and effective protection of intellectual property rights. The Administration is committed to

multilateral and bilateral negotiations, and enforcement of existing agreements, that will accomplish these objectives. The trade policy must also be consistent with a vigorous public research and development program.

6. **Review proposals to increase the supply and availability of patient capital:** A number of proposals have been made to increase the time-horizon of investments. For example, the National Academy of Science has proposed creating a publicly-funded, privately run Civilian Technology Corporation. The private-sector Council on Competitiveness has proposed a sweeping set of reforms to improve corporate governance and encourage long-term asset ownership. The Administration will review these and other proposals in an effort to improve the environment for long-term investments.

7. **Ensure that federal regulatory policy encourages investment in innovation and technology development that achieve the purposes of the regulation at the lowest possible cost:** Regulatory policy can have a significant impact on the rate of technology development in energy, biotechnology, pharmaceuticals, telecommunications, and many other areas. The caliber of the regulatory agencies can affect the international competitiveness of the industries they oversee. At the same time, skillful support of new technologies can help businesses reduce costs while complying with ambitious environmental regulations. A well designed regulatory program can stimulate rather than frustrate attractive directions for innovation. We will review the nation's regulatory "infrastructure" to ensure that unnecessary obstacles to technical innovation are removed and that priorities are attached to programs introducing technology to help reduce the cost of regulatory compliance.

Education and Training

Technology policy can play a key role in supporting our commitment to improving the education and training opportunities for all Americans.

First, it is essential that priorities in research, regulatory, and other policies designed to encourage innovation and investment in the economy reflect the need to create high-performance workplaces -- workplaces which offer all workers skilled, rewarding jobs with opportunities for growth. These priorities are reflected in the design of the initiatives described earlier. Our plan ensures that economic growth works to the advantage of all Americans in the workforce, not just an elite group of well-educated workers who have easy access to training in new skills.

Secondly, it is essential that all Americans have access to the education and training they need and that the teaching enterprise itself become a high-performance workplace. Our initiatives in education and training follow four central themes: restructuring primary and secondary schooling, using youth apprenticeships and other programs to facilitate the transition from school to work for people who do not expect to go to college, making training accessible and affordable to all workers who need to upgrade their skills to keep pace with a rapidly changing economy, and programs specifically targeted to help workers displaced by declining defense budgets or increased international trade.

Technology policy can and must support all of these objectives.

1. Public investment will be provided to support technology that can increase the productivity of learning and teaching in formal school settings, in industrial training, and even at home. New information technologies can give teachers more power in the classroom and create a new range of employment opportunities. Schools can themselves become high-performance workplaces.

2. Public investment will also be increased for programs designed to provide needed skills in mathematics, science, and engineering. Programs will be supported in primary, secondary, college, post-graduate schools and in a range of industrial training facilities. Particular attention will be paid to increasing participation by minorities and women.

3. Defense capabilities in education and training represent an important resource. New programs will accelerate transfer of this experience to civilian institutions. The Department of Defense and NASA have invested heavily both in the hardware and software needed for advanced instructional systems, they have accumulated valuable experience in how to use the new technologies in practical teaching situations. The Navy Training Systems Center and the Army Simulation, Training and Instrumentation Command together spend about $1 billion a year on training systems. There are over 150 defense simulation and training companies serving these needs in central Florida alone.

Specific initiatives include the following:

A. **Access to the Internet and developing NREN will be expanded** to connect university campuses, community colleges, and K-12 schools to a high-speed communications network providing a broad range of information resources. Support will be provided for equipment allowing local networks in these learning institutions access to the network along with support for development of high-performance software capable of taking advantage of the emerging hardware capabilities.

B. **An interagency task force will be created** from appropriate federal agencies to (i) establish software and communication standards for education and training, (ii) coordinate the development of critical software elements, (iii) support innovative software packages and curriculum design, and (iv) collect information resources in a standardized format and make them available to schools and teaching centers throughout the nation through both conventional and advanced communication networks. This task force will provide specific assistance to the interagency task force on worker displacement.

C. **Programs in the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) Committee on Education and Human Resources programs will be enhanced.** These programs are designed to improve the teaching of science, mathematics, and engineering at all levels. In K-12 schools, primary emphasis will be placed on teacher preparation, comprehensive organizational reform, and curriculum development. Programs for undergraduate education emphasize faculty preparation and organization and curriculum reforms but place heaviest emphasis on student incentives. At the graduate level, most funding is directed for fellowships.

D. **Proposals will be encouraged for an industry consortia or regional alliance designed to develop new teaching** systems (hardware and software) and work with training organizations throughout the nation to develop, install, and maintain state-of-the art systems. Firms now providing similar services to defense training organizations are likely to participate.

E. **Promote Manufacturing Engineering Education.** Traditional engineering education, with its focus on product design and analysis, has seriously neglected the management and operation of manufacturing activities. This program provides matching funds for graduate or undergraduate programs in manufacturing engineering.

New Options offered by Information Technology in Education and Training

- Computers can create an unprecedented opportunity for learning complex ideas, creating an environment that can closely approximate real work environments or experimental apparatus.
- Interconnected systems can help students work together as parts of a team even if the members of the team are separated geographically.
- Training can be embedded as a part of new equipment. Complex machine tools or software packages can be purchased with tutorials that bring new operators up to speed quickly, that provide quick refreshers for unusual events, and that allow operators to build new competencies during off-hours.
- Advanced systems permit instruction tailored to the learning needs of individuals. This is particularly important for retraining adults that reenter a training environment with a great variety of learning needs and learning abilities. And it is important in ensuring that minorities, women, people with disabilities, and others that may be disadvantaged by traditional approaches to instruction.
- Communication technologies can bring a rich education and training environment to people isolated because they live in remote areas or because of the demands of work and family responsibilities.
- Technology can reduce the burden of record-keeping and other paperwork that consumes so much teacher time in today's classrooms. It can also bring teachers and schools together in ways that facilitate the exchange of ideas and build a sense of community.

" Information Superhighways"

Efficient access to information is becoming critical for all parts of the American economy. Banks, insurance companies, manufacturing concerns, and many other business operations now depend on high-speed communication links. Many more businesses can take advantage of such systems if they are reliable, easy to use, and inexpensive. Such systems would also be of enormous value to schools, hospitals, and other public organizations. Even the most remote school could be connected to state-of-the art information. Hospitals could call in experts for consultation even if the expert is far from the patient.

Accelerating the introduction of an efficient, high-speed communication system can have the same effect on US economic and social development as public investment in the railroads had in the 19th century. It would provide a critical tool around which many new business opportunities can develop.

Specific new programs include :

A. **Implementation of the High-performance Computing and Communications Program** established by the High-Performance Computing Act of 1991 introduced by Vice President Gore when he served in the Senate. Research and development funded by this program is creating (1) more powerful super computers, (2) faster computer networks and the first national high speed network, and (3) more sophisticated software. This network will be constructed by the private sector but encouraged by federal policy and technology developments. In addition, it is providing scientists and engineers with the tools and training they need to solve "Grand Challenges", research problems--like modeling global warming--that cannot be solved without the most powerful computers.

B. **Create a Task Force on Information Infrastructure.** Government telecommunication and information policy has not kept pace with new developments in telecommunications and computer technology. As a result, government regulations have tended to inhibit competition and delay deployment of new technology. For instance, without a consistent, stable regulatory environment, the private sector will hesitate to make the investments necessary to build the high-speed national telecommunications network that this country needs to compete successfully in the 21st Century. To address this problem and others, we will create a high-level inter-agency task force within the National Economic Council which will work with Congress and the private sector to find consensus on and implement policy changes needed to accelerate deployment of a national information infrastructure.

C. **Create an Information Infrastructure Technology Program** to assist industry in the development of the hardware and software needed to fully apply advanced computing and networking technology in manufacturing, in health care, in life-long learning, and in libraries.

D. **Provide funding for networking pilot projects** through the National Telecommunications and Information Administration (NTIA) of the Department of Commerce. NTIA will provide matching grants to states, school districts, libraries, and other non-profit entities so that they can purchase the computers and networking connections needed for distance learning and for hooking into computer networks like the Internet. These pilot projects will demonstrate the benefits of networking to the educational and library communities.

E. **Promote dissemination of Federal information.** Every year, the Federal government spends billions of dollars collecting and processing information (e.g. economic data, environmental data, and technical information). Unfortunately, while much of this information is very valuable, many potential users either do not know that it exists or do not know how to access it. We are committed to using new computer and networking technology to make this information more available to the taxpayers who paid for it. In addition, it will require consistent Federal information policies designed to ensure that Federal information is made available at a fair price to as many users as possible while encouraging growth of the information industry.

Transportation and other Infrastructure

A competitive, growing economy requires a transportation system that can move people, goods and services quickly and efficiently. To meet this challenge, each transport sector must work effectively both by itself and as part of a larger, interconnected whole. With nearly one out of every six dollars of GDP now spent in transportation related activities, technologies that increase the speed, reliability, and cost-effectiveness of the transportation sector will also increase the economy's competitiveness and ability to create jobs.

One of the greatest challenges we face is to rehabilitate and properly maintain the huge stock of infrastructure facilities already in place. With this in mind, the Administration will consider establishing an integrated program of research designed to enhance the performance and longevity of the existing infrastructure. Among other things, this program would systematically address issues of assessment technology and renewal engineering. A strategic program to develop new technologies for assessing the physical condition of the nation's infrastructure, together with techniques to repair and rehabilitate those structures, could lead to more cost-effective maintenance of the infrastructure necessary to economic growth.

Providing a world class transportation sector will require the nation to meet the challenges posed both by increased congestion in many parts of the transportation system, and by the need to rebuild and maintain a public capital stock valued at more than $2.4 trillion. To meet these challenges, the Administration's program includes increased investment in a number of areas:

A. **Upgrading the nation's highways and transit systems by providing additional funding authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).** Improve mass transit services and facilities by investing an additional $600 million in 1994 and $1 billion each year from 1995 to 1998 in transit capital projects.

B. **Investing in magnetic levitation (maglev) transportation and high-speed rail** by providing funds for a maglev prototype and for start-up of private or state/local high-speed rail projects.

C. **Increasing research on new technologies that could lead to the development of "smart highways".** These efforts range from technologies that provide in-route planning and traffic monitoring, to those that would support a fully automated system.

D. **Increasing research on civil aviation technologies**, including an examination of the economic, market, safety, and noise aspects of advanced aircraft. We will also support advanced in-flight space and ground-based command, navigation, weather prediction, and control systems. US aeronautical, research and development facilities infrastructure such as wind tunnels will also be revitalized.

E. **Increasing research on new materials** that will allow the construction of infrastructure facilities that are more durable, minimizing the frequency of costly reconstruction with its attendant disruption of traffic.

F. **Exploring new assessment technologies for more accurately assessing the expected life of existing public infrastructure.** A number of new technologies from a variety of industries, including electronic, medical, space, defense, and manufacturing sectors, could be used to develop more-reliable, nondestructive methods for evaluating the condition of existing structures. Since current assessment techniques are so unreliable, engineering decisions must include significant room for error and costly fail-safe features. The data made available by nondestructive evaluation and monitoring could be used to schedule better an ongoing program of cost-effective maintenance and rehabilitation.

G. **Supporting renewal engineering programs which target materials and construction methods that would lower the cost of rehabilitating and repairing structures.**

GOAL: MAKING GOVERNMENT MORE EFFICIENT AND MORE RESPONSIVE

The federal government must use technology to improve the efficiency of its own operations. Many private businesses have used advanced communication systems to improve the efficiency of their operations and to make their businesses more sensitive to the needs of individual customers and clients. The federal government must move actively to take advantage of these new opportunities. Similarly, the federal government is one of the nation's largest consumers of energy yet many of its buildings are far less efficient than structures owned by private firms and taxpayers are paying the bill.

The enormous purchasing power of the federal government can be used to stimulate markets for innovative products in many areas. This power should be exercised in a way that is consistent with overall national technology objectives. President Clinton is committed to reinventing government, to make government work better, harder, and smarter. Technology can help us achieve that goal.

Information Technology

Information technology will be used to dramatically improve the way the Federal Government serves the people. Government will become more cost-effective, efficient, and "user-friendly." In particular, we will use technology to improve the quality and timeliness of service, to provide new ways for the public to communicate with their government, and to make government information available to the public in a timely and equitable manner.

Fast communication makes it possible for teams to work closely on a project even if the team members are physically distant from each other. Information technology presents an opportunity to flatten existing organizational structures, form effective cross-disciplinary problem-solving groups, and expand the definition of the workplace and workforce via telecommuting. But business organizations in many sectors have found that automating existing work processes based on a tradition of processing paper does not always provide the greatest benefits from investment in automation. Efficiency gains from the new technology often can only be captured if changes are made in the structure of their organizations and the way they are managed. The administration will undertake a careful review of government management with a view to making the most efficient possible use of new information technologies.

Improved quality and timeliness of service. Information technology will eliminate errors generated in routine paper processes while reducing processing time. For example, the Internal Revenue Service (IRS)'s electronic filing program is reducing error rates on tax returns from 16 percent to less than 3 percent, while speeding up the delivery of refunds by as much as four weeks. Agencies are moving forward to convert many other paper processes to electronic form.

Information on paper is hard to retrieve. Automation is allowing the Social Security Administration to provide beneficiaries with "one-stop" service anywhere in the country from an 800 number. Better connections among Federal offices, in a manner that safeguards the privacy of individuals, will make it easier to get answers from the government.

New ways to communicate. In the past, citizens typically had to go to a federal office during business hours to receive benefits or services. A government that uses technology to expand its hours of service and communicate with the public electronically will deliver services and benefits where people need them, not where the government provides them. We will make it possible for people to communicate with a Federal agency using electronic as well as conventional mail. Automated terminals may be placed in public locations such as shopping centers or post offices that could provide in-hours access to a variety of government services.

Access to government information. Government information is a public asset. Markets depend on sound and timely economic decisions. Federal geographic and climatological information allows farmers to apply fertilizer more efficiently, local governments to formulate environmental policy, and public safety officials to prepare for natural disasters. The government will promote the timely and equitable access to government information via a diverse array of sources, both public and private, including state and local governments and libraries. The development of public networks such as the Internet and the National Research and Educational Network (NREN) will contribute significantly to this diversity, enabling government information to be disseminated inexpensively to a broad range of users.

Policy and technology infrastructure. Many of the government's policies in such areas as privacy, information security, records management, information dissemination, and procurement will be updated to take into account the rapid pace of technological change. In addition, the government must apply the economic principle of maximizing return on investment when acquiring information technology, and be able to acquire commercial, off-the-shelf technology quickly and easily.

. In addition, resources are needed to provide a technology infrastructure to support these service delivery improvements. The support for the IRS Tax System Modernization in the stimulus package, along with requests elsewhere for resources to support information technology, are examples of the government investing in technology to put people first.

Energy Efficiency

The federal government is wasting tax dollars by operating inefficient buildings. More than $2 billion could be invested in energy retrofits in federal buildings with average payback times less than 3-4 years. California, Texas, Iowa, and several other states have successful programs which have profitably invested in state buildings during the past several years. The programs have both increased the efficiency of state structures and stimulated the local construction industry.

HUD spends approximately $3-4 billion a year subsidizing the energy bills of about 5 million low income households. At least $3 billion could be invested in energy retrofits with a payback less than five years.

We are introducing a multi-year program designed to capture the economic benefits of energy retrofits, create new jobs in the construction industry, and to foster innovation in efficient building components and in the construction industry itself.

Procurement Policy

The federal government, particularly the Department of Defense and NASA, is a gigantic customer for high technology products. Historically, it played an important role in helping assure an early market for high-risk commercial technologies that were extremely expensive to develop. For example, the defense-space share of the U.S. computer hardware market was 100 percent in 1954, and it exceeded 50 percent until 1962. Semiconductors, jet aircraft, and pharmaceuticals also benefited from this government investment.

In recent years, DoD has ceased to be an influential "first customer" for commercial technology. By and large, this is not due to differing technical requirements: today's commercial capabilities often equal or surpass DoD requirements. Rather the problem is a growing morass of procurement laws and regulations. Many commercial manufacturers refuse to do business with DoD altogether, and those that do often wall off their defense production. As a result, the military and commercial worlds have grown increasingly segregated from one another.

The cost of this segregation both to DoD and the nation is high, as a 1991 report by the Center for Strategic and International Studies plainly stated:

> "[It] results in higher prices to DoD (even when lower-cost commercial alternatives exist for the same requirements), loss of a broad domestic production base that could be available to defense for peacetime and surge demands, and lack of access to commercial state-of-the-art technologies. Additionally, the wall between engineers and scientists engaged in commercial and military work impedes the kind of shoulder-to-shoulder contact that is the essence of technology transfer and that is basic to achieving greater job stability and growth opportunities for the U.S. work force."

The federal government will make it a priority to thoroughly review and reform its procurement policy, particularly (but not exclusively) defense procurement policy. It will begin by reviewing the recommendations of the congressionally-mandated "Section 800 Panel" (after Section 800 of the FY1991 Defense Authorization Act), which recently completed a detailed study of DoD procurement practices.

More specifically, the federal government will begin steps necessary to achieve the following reforms:

- Government purchases or government-contracted development should give priority to commercial specifications and products.
- Agencies should invest in and procure advanced technologies, where it is economically feasible, in order to facilitate their commercialization.
- Agencies should experiment with a portion of their procurement budget to allow them to procure innovative products and services incorporating leading-edge technologies.
- Agencies should evaluate bids based on their ability to minimize life-cycle cost rather than acquisition cost, including environmental, health and safety costs borne by the public.
- Agencies should obtain rights in technologies developed under government contracts only to the extent necessary to meet the agencies' needs, leaving contractors with the rights necessary to encourage private sector investment in the development of commercial applications.
- Agencies should use performance-based contracting strategies that give contractors the design freedom and financial incentive to be innovative and efficient.

GOAL: WORLD LEADERSHIP IN BASIC SCIENCE, MATHEMATICS, AND ENGINEERING.

It is essential to recognize that technical advances depend on basic research in science, mathematics, and engineering. Scientific advances are the wellspring of the technical innovations whose benefits are seen in economic growth, improved health care, and many other areas. The federal government has invested heavily in basic research since the Second World War and this support has paid enormous dividends. Our research universities are the best in the world; our national laboratories and the research facilities they house attract scientists and engineers from around the globe. In almost every field, United States researchers lead their foreign colleagues in scientific citations, in Nobel Prizes, and most other measures of scientific excellence.

This administration will both ensure that support for basic science remains strong, and that stable funding is provided for projects that require continuity. We will not allow short-term fluctuations in funding levels to destroy critical research teams that have taken years to assemble.

But stable funding requires setting clear priorities. In recent years, rather than canceling less important projects when research budgets have been tight, Federal agencies have tended to spread the pain, resulting in disruptive cuts and associated schedule delays in hundreds of programs. We will improve management of basic science to ensure that high-priority programs receive sustained support.

University Research. The National Science Foundation and the National Institutes of Health provide the vast majority of Federal funding for university research. Since universities play dual roles of research and teaching, the long-term scientific and technological vitality of the U.S. depends upon adequate and sustained funding for university research grant programs at NSF, NIH, and other research agencies.

National Laboratories. In fields like high-energy physics, biomedical science, nuclear physics, materials sciences, and aeronautics, the national laboratories provide key facilities used by researchers in academia, Federal labs, and industry. In addition, in many fields, researchers at Federal labs are world leaders. We will ensure that Federal laboratories continue their key role in basic research and will encourage more cooperative research between the laboratories and industry and universities. And we will develop new missions for our federal labs to make full use of the talented and experienced men and women working there in today's post-cold war era.

Space Science and Exploration. The resources needed for space exploration and research make government funding essential. We will continue to work with foreign partners to design missions needed to explore our solar system and the universe beyond. Research on micro-gravity and life-sciences as applied to the human in space program will also be supported.

Environmental Research. In FY93, the Federal government will invest in research to better understand global warming, ozone depletion, and other phenomena important to local, regional, and global environments. This research is essential if we are to fully assess the damage mankind is doing to our planet and take effective action to address it. Vital research on local and regional environmental problems will also be strongly supported at EPA, NOAA, NASA, DoD, DOL, USDA, and other agencies.

BUILDING AMERICA'S ECONOMIC STRENGTH: NEW INITIATIVES

- Permanent Extension Of The Research And Experimentation Tax Credit
- Invest In A National Information Infrastructure
- Advanced Manufacturing Technology
- Facilitate Private Sector Development of a New Generation of Automobiles
- Improve Technology For Education And Training
- Investments In Energy-Efficient Federal Buildings

PERMANENT EXTENSION OF THE RESEARCH AND EXPERIMENTATION TAX CREDIT

Objectives

The success of U.S. businesses depends on their ability to compete both in the development of innovative products and production processes and in their ability to bring new products to the market quickly and efficiently. Unfortunately, the U.S. has fallen behind many of its foreign competitors in civilian research. Currently the U.S. invests 1.9 percent of GDP in non-defense R&D compared to 3.0 percent in Japan and 2.7 percent in Germany. US investment in research and experimentation can be increased through a tax credit for R&E that can provide a stable basis for business planning.

Increasing investment in research is important to foster economic growth and technological development and to improve international competitiveness. But many of the benefits of research cannot be captured by the businesses making the investments. Instead, these benefits redound to competitors and to the public. In the absence of an incentive for research, businesses simply might not invest in research the way our economic goals demand. The research and experimentation credit should be permanently extended to foster economic growth and technological development, create jobs, and improve international competitiveness. R&D activity, by its nature, is long-term, and taxpayers should be able to plan their research activity knowing that the credit will be available when the research is actually undertaken.

Actions

The Administration will propose that the Research and Experimentation Tax Credit be made permanent. The credit would apply to qualified research expenditures by businesses and businesses expenditures for university basic research paid or incurred after June 30, 1992. The proposal also provides a basis for start-up businesses to qualify for the credit.

INVEST IN AN INFORMATION INFRASTRUCTURE

Objectives

Today's "Information Age" demands skill, agility and speed in moving information. Where once our economic strength was determined solely by the depth of our ports or the condition of our roads, today it is determined as well by our ability to move large quantities of information quickly and accurately and by our ability to use and understand this information. Just as the interstate highway system marked a historical turning point in our commerce, today "information superhighway" -- able to move ideas, data, and images around the country and around the world -- are critical to American competitiveness and economic strength.

This information infrastructure -- computers, computer data banks, fax machines, telephones, and video displays -- has as its lifeline a high-speed fiber-optic network capable of transmitting billions of bits of information in a second. Imagine being able to transmit the entire Encyclopedia Brittanica in one second.

The computing and networking technology that makes this possible is improving at an unprecedented rate, expanding both our imaginations for its use and its effectiveness. Through these technologies, a doctor who needs a second opinion could transmit a patient's entire medical record -- x-rays and ultrasound scans included -- to a colleague thousands of miles away, in less time than it takes to send a fax today. A school child in a small town could come home and through a personal computer, reach into an electronic Library of Congress -- thousands of books, records, videos and photographs, all stored electronically. At home, viewers could choose whenever they wanted from thousands of different television programs or movies.

Efficient access to information is becoming increasingly more important for all parts of our economy. Banks, insurance companies, manufacturing concerns, and many other businesses now depend on high speed communication networks. These networks have become a critical tool around which many new business opportunities are developing.

And, by harnessing the power of supercomputers able to transform enormous amounts of information to images or solve incredible complex problems in record time, and share this power with an ever-expanding audience of scientists, businesses, researchers, students, doctors and others, the potential for innovation and progress multiplies rapidly. Supercomputers help us develop new drugs, design new products, predict dangerous storms and model climate changes. They help us design better cars, better airplanes, more efficient manufacturing processes. Accelerating the introduction of an efficient, high-speed communication network and associated computer systems would have a dramatic impact on every aspect of our lives. But this is possible only if we adopt forward-looking policies that promote the development of new technologies and if we invest in the information infrastructure needed for the 21st Century.

Actions

A. **Implementation of the High-performance Computing and Communications Program** established by the High-Performance Computing Act of 1991 introduced by Vice President Gore when he served in the Senate. Research and development funded by this program is creating (1) more powerful super computers, (2) faster computer networks and the first national high speed network, and (3) more sophisticated software. This network will be constructed by the private sector but encouraged by federal policy and technology developments. In addition, it is providing scientists and engineers with the tools and training they need to solve "Grand Challenges", research problems--like modeling global warming--that cannot be solved without the most powerful computers.

B. **Create a Task Force on Information Infrastructure.** Government telecommunication and information policy has not kept pace with new developments in telecommunications and computer technology. As a result, government regulations have tended to inhibit competition and delay deployment of new technology. For instance, without a consistent, stable regulatory environment, the private sector will hesitate to make the investments necessary to build the high-speed national telecommunications network that this country needs to compete successfully in the 21st Century. To address this problem and others, we will create a high-level inter-agency task force within the National Economic Council which will work with Congress and the private sector to find consensus on and implement policy changes needed to accelerate deployment of a national information infrastructure.

C. **Create an Information Infrastructure Technology Program** to assist industry in the development of the hardware and software needed to fully apply advanced computing and networking technology in manufacturing, in health care, in life-long learning, and in libraries.

D. **Provide funding for networking pilot projects** through the National Telecommunications and Information Administration (NTIA) of the Department of Commerce. NTIA will provide matching grants to states, school districts, libraries, and other non-profit entities so that they can purchase the computers and networking connections needed for distance learning and for hooking into computer networks like the Internet. These pilot projects will demonstrate the benefits of networking to the educational and library communities.

E. **Promote dissemination of Federal information.** Every year, the Federal government spends billions of dollars collecting and processing information (e.g. economic data, environmental data, and technical information). Unfortunately, while much of this information is very valuable, many potential users either do not know that it exists or do not know how to access it. We are committed to using new computer and networking technology to make this information more available to the taxpayers who paid fo [illegible] In addition, it will require consistent Federal information policies designed to ensure that Federal information is made available at a fair price to as many users as possible while encouraging growth of the information industry.

PROMOTE ADVANCED MANUFACTURING TECHNOLOGY

Objectives

Manufacturing remains the foundation of the American economy. Although the United States was the unchallenged world leader in manufacturing for many years, our performance has slipped badly in recent decades. American firms still excel at making **breakthroughs**, such as IBM's discovery of high-temperature superconductivity, but foreign firms are often better at **follow through**: namely, turning technology into new products and processes both quickly and cheaply.

Both American industry and government under-invest in manufacturing. In contrast to their foreign competitors, U.S. firms neglect process-related R&D within their overall R&D portfolio. And the federal government allocated only two percent of its $70 billion R&D budget to manufacturing R&D in FY92.

We have also neglected the dissemination of existing technology and know-how. New manufacturing technologies and approaches are available that can lead to dramatic improvements in product quality, cost, and time-to-market. Although a few U.S. firms have begun to adopt these technologies and approaches, most firms still lag. The problem is most acute among the 360,000 small and medium-sized manufacturers, who employ 8 million workers, but too often lack the resources or ability to gain access to the technologies that will help them grow, increase their profits, and create jobs.

Finally, investments in manufacturing have not reflected the concerns and the knowledge of factory employees. Firms should use technology to build on rather than reduce worker skills.

Actions:

A. **Provide increased funding for advanced manufacturing R&D.** SEMATECH, an industry consortium to develop semiconductor manufacturing technology, will receive continued matching funds from the Department of Defense in FY94. Industry consortia (including universities and government laboratories, where appropriate) will be the preferred performers of such R&D, to assure its commercial relevance. Programs will be encouraged in the development of a new automobile, new construction technologies, intelligent control and sensor technologies, rapid prototyping, and environmentally-conscious manufacturing.

B. **Support Agile Manufacturing.** The new Agile Manufacturing Program (also known as "Enterprise Integration") is designed to capitalize on the emerging shift from mass production to flexible or "agile" manufacturing. Agile manufacturing allows independently-owned companies to form instantaneous partnerships with firms that have complementary capabilities in order to exploit market opportunities. These partnerships -- called "virtual enterprises" or "virtual corporations" -- will leverage our nation's strengths in information technology. This program supports both the development and dissemination of such technology for enterprise integration.

C. **Create a national network of manufacturing extension centers.** Many small and medium-sized manufacturing firms in the U.S. have not taken advantage of new technologies and best practices, either because they are unaware of them or because they cannot afford them. Existing state and federal manufacturing extension centers provide assistance to a small number of firms, but service must be greatly expanded to give all firms access to the technologies, testing facilities, and training programs they need. Federal funds (to be matched by state and local governments) will go to support and build on existing state, local, and university programs, with the goal of creating a nation-wide network of extension centers.

D. **Seed Regional Technology Alliances.** Manufacturing industries tend to cluster geographically, and the strength of these technology clusters is fast becoming a key to international competitiveness. This new program is designed to encourage firms and research institutions in a particular region to exchange information, share and develop technology, and develop new products and markets. Federal funds (to be matched by alliance members) will go to support applied R&D and a range of technology services oriented particularly to smaller firms (test facilities for new products and prototypes, design and management assistance, start-up incubators, education and training, export promotion and market monitoring, and quality testing and standards certification).

E. **Promote Manufacturing Engineering Education.** Traditional engineering education, with its focus on product design and analysis, has seriously neglected the management and operation of manufacturing activities. This program provides matching funds for graduate or undergraduate programs in manufacturing engineering.

F. **Promote Environmentally-Conscious Manufacturing.** The Departments of Commerce, Energy, Defense, and a number of other federal organizations will incorporate environmental goals in research and development consortia for manufacturing. In addition, NIST, working with EPA, DoE, and state agencies, will undertake a technical support program in energy and environmental waste minimization for small and medium-sized firms.

FACILITATE PRIVATE SECTOR DEVELOPMENT OF A NEW GENERATION OF AUTOMOBILES

Objectives:

The automobile plays a central role in U.S. manufacturing capabilities, in America's economy, and in the lives of most Americans. If America's auto industry is to remain competitive and strong in the 21st century, preserving jobs, sustaining economic growth, and expanding its business, it must continue its exploration of new technologies that encourage the industry's growth and protect the environment. Increasingly stringent environmental concerns both here and abroad make this effort increasingly more essential and the need for innovation and new ideas even greater.

New fuels and new propulsion systems developed during the last decade offer promise as eventual replacements for the combination of gasoline and the internal combustion engine that have served so well for generations. Given adequate investment in research and development, and adequate incentives for U.S. producers to invest in these technologies, a new generation of vehicles could be on the market -- preserving jobs, expanding growth -- that would be safe and perform as well, if not better than existing automobiles, cost no more to drive than today's automobiles, consume only domestic fuels such as natural gas and renewables, and produce little or no pollution.

While the basic technology needed to achieve this goal is available, converting it to a practical vehicle represents an historic challenge. The potential can only be captured under the leadership of the U.S. business community and the industry itself. Success must be defined by their ability to develop a vehicle that can be built and sold successfully in private markets. They must play a central role in designing an efficient government-industry partnership in which the industry plays a leadership role in establishing priorities.

If U.S. producers lead the world in introducing such a vehicle, the domestic industry would be able to meet expanding domestic and international markets with a machine that significantly reduces pollution and operates from domestic fuel sources.

This initiative represents a bold and dramatic step toward a more profitable, and more environmentally sound future for one of America's most important industries.

Actions

A. **Establish a "clean car" task force linking research efforts of relevant agencies with those of U.S. auto manufacturers.** This task force will immediately establish an advisory group consisting of technology leaders in the principle US automobile manufacturers, their principal suppliers, and US fuel suppliers. It will oversee the establishment of cooperative research ventures in (i) fuel-cells and the control and other systems required for practical fuel-cell hybrid vehicle designs, (ii) advanced batteries, ultra-capacitors, advanced gas storage & delivery systems, and (iii) production of methanol and hydrogen from natural gas, municipal waste and other waste products, energy crops, and the electrolysis of water

B. **The task force will establish a special advisory group** consisting of key state officials and representatives of the participating Departments to (i) design a program for using the authority already present in the Clean Air Act revision of 1991 and the National Energy Act of 1992 to encourage introduction of prototype vehicles consistent with the objectives of this program, (ii) coordinate state regulatory programs designed to require low or zero emission vehicles, and (iii) propose federal regulations needed to supplement state efforts. It will also design programs for managing federal vehicle procurement.

C. **Working with its private sector and state advisory groups, the task force will prepare a list of development requirements and conduct a systematic search for capabilities in national laboratories and defense facilities.** Capabilities identified will be integrated rapidly into the research teams.

IMPROVE TECHNOLOGY FOR EDUCATION AND TRAINING

Objectives

This project will support the development and introduction of computer and communications equipment and software that can increase the productivity of learning in formal school settings, a variety of business training facilities, and in homes.

Actions

A. **Access to the Internet and developing high-speed National Research and Educational Network (NREN) will be expanded** to connect university campuses, community colleges, and K-12 schools to a high-speed communications network providing a broad range of information resources. Support will be provided for equipment allowing local networks in these learning institutions access to the network along with support for development of high-performance software capable of taking advantage of the emerging hardware capabilities.

B. **An interagency task force will be created** from appropriate federal agencies to (i) adopt software and communication standards for education and training, (ii) coordinate the development of critical software elements, (iii) support innovative software packages and curriculum design, and (iv) collect information resources in a standardized format and make them available to schools and teaching centers throughout the nation through both conventional and advanced communication networks. This task force will provide specific assistance to the interagency task force on worker displacement.

C. **Programs in the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) Committee on Education and Human Resources programs will be enhanced.** These programs are designed to improve the teaching of science, mathematics, and engineering at all levels. In K-12 schools, primary emphasis will be placed on teacher preparation, comprehensive organizational reform, and curriculum development. Programs for undergraduate education emphasize faculty preparation and organization and curriculum reforms but place heaviest emphasis on student incentives. At the graduate level, most funding is directed for fellowships.

D. **Proposals will be encouraged for an industry consortia or regional alliance designed to develop new teaching systems** (hardware and software) and work with training organizations throughout the nation to develop, install, and maintain state-of-the art systems. Firms now providing similar services to defense training organizations are likely to participate.

E. **Promote Manufacturing Engineering Education.** Traditional engineering education, with its focus on product design and analysis, has seriously neglected the management and operation of manufacturing activities. This program provides matching funds for graduate or undergraduate programs in manufacturing engineering.

MAKE ENERGY EFFICIENCY INVESTMENTS IN FEDERAL BUILDINGS

Objectives

This project would increase the efficiency of government by making cost-effective investments in buildings where the energy bills are paid by the taxpayers. The project would create a significant number of jobs in urban areas, create new businesses and job skills, stimulate markets for innovative energy efficiency equipment, and reduce the impact of the federal government on the environment.

Actions

In the case of federal building retrofits, funding will be provided to the Department of Energy which will be responsible for managing the program.

In the case of funds for federally subsidized housing, funds will be provided to HUD which will manage the fund with DoE providing technical guidance.

A. **Create an advisory group** of key officials from states with successful state building retrofit programs, representative building facility managers from federal buildings, and utility managers of successful "demand-side management" programs. This group will ensure that the federal program is designed with the advantage of their experience and provide periodic evaluation and guidance.

B. **The managers of the funds will provide funding for preliminary "walk through" audits**, following the experience in the Texas program. Based on these preliminary studies, funding will be provided for more extensive audits. Proposals made in these audits will be funded using the following criteria:
   -- technical merit of the proposal;
   -- extent to which all cost-effective savings (i.e. justified on a 10% real discount rate) have been captured;
   -- cost-sharing by the agency, utility, or other source of financing;
   -- in the case of federally subsidized housing, state and other non- program cost-sharing will be considered, including use of Low-Income Home Energy Assistance Program (LIHEAP) and other funds -- at least a 1:1 match should be expected; and
   -- the extent to which contractors invest in hiring and training new workers.

In each proposal, at least 6% of the program cost will be set aside for monitoring and evaluation using regional centers that follow an agreed protocol established by a lead center

Up to 10% of the program funds should be spent to create early markets for innovative technologies which represent a significant advance over existing systems and have the potential for large future applications.

Mr. ROGERS. It is my understanding that the Federal Government's role in creating the national information infrastructure would be to install that last-mile connector between homes, businesses, schools and so forth, and the private sector's backbone network.

Is that an accurate assessment of your proposal?

Mr. SUGRUE. Yes. I think that is fair. Again, I don't want to ignore the major work NTIA does, which is to formulate government policy affecting the regulation and the standards for this industry. But for the new parts of the initiative, yes, we would be funding the last-mile interconnections.

Mr. ROGERS. Why wouldn't the private sector be doing that anyway?

Mr. SUGRUE. Well, again, we are focusing on those areas that government is currently involved in now and traditionally supports.

We aren't proposing to go out and wire the country and interconnect all businesses and residences. We are talking about again focusing on those areas that are the traditional domain of government activity.

PTFP BUDGET REQUEST

Mr. ROGERS. Well, now, for PTFP, you are requesting $20,636,000, a decrease of about 3 percent. Why do your budget justifications appear to show a greater cut in staff for the PTFP program? Are positions being taken from the PTFP program for the NII?

Mr. SUGRUE. Mr. Connors maybe could answer that.

Mr. CONNORS. The FY 1993 stimulus package was to be administered through PTFP and contained $64,000,000 and 30 positions to jump start the NII. In FY 1994, the positions are transferred to the NII program which will now have a separate appropriation. There is no actual decrease in positions for PTFP. The program has 15 positions which is the same amount it had in FY 1992 and 1993.

Mr. ROGERS. Assuming you don't get the stimulus monies, how will you fill these positions?

Mr. CONNORS. PTFP would continue to maintain the current onboard staff of 15 FTEs. If we don't get the stimulus package, we will not fill any additional positions.

Mr. ROGERS. So then you would not be cutting your staffing for PTFP?

Mr. CONNORS. That is correct.

Mr. ROGERS. Your budget request was assuming that you would get the stimulus package? The numbers we are dealing with are the numbers that you assumed——

Mr. SUGRUE. PTFP's FY 1993 positions reflected increases for the stimulus package.

Mr. CONNORS. Yes, it assumes that there were 45 positions in PTFP in 1993, which is an increase of 30 for the stimulus package.

Mr. ROGERS. Since the stimulus package is now gone, are you going to resubmit something for us or do you need to?

Mr. CONNORS. We don't need to at this time, because there is a 1994 request pending before the Committee of $51 million for the NII.

Mr. ROGERS. Okay. I will have other questions, but I will yield.

Mr. MOLLOHAN. I think I will yield to Mr. Skaggs.

SPECTRUM REALLOCATION/AUCTION

Mr. SKAGGS. I thank my colleagues senior on the committee for yielding. I have another subcommittee hearing to get to, and I appreciate it very, very much.

I would like to provide some relief from our discussion of NII for just a minute, and then get back to it, and talk about the spectrum reallocation and bidding issue, which we discussed briefly with the FCC when they were on a couple of weeks ago.

One of the concerns, I think, is how realistic it is to budget, based upon the projected revenues coming in from that bidding, and I am wondering how your people validate, the $4 billion-plus that is projected?

Mr. SUGRUE. As revenue?

Mr. SKAGGS. Right.

Mr. SUGRUE. Yes. Well, the first application of competitive bidding that I think the FCC would have in mind would be for "personal communication systems," which are the next generation of cellular telephones. They would be smaller, lighter, using so-called microcell technology.

The FCC has a proceeding under way to set the ground rules for those licenses. They will define the geographic areas, who can participate, how much spectrum per license and etc. We will be in a position to start issuing licenses under one technique or another, whether it is through comparative hearings, lotteries, or if this legislation passes, competitive bidding, probably sometime by the end of the year or early next year.

Mr. SKAGGS. It requires a new statutory authority to do the bidding?

Mr. SUGRUE. It would require new statutory authority to do the bidding; that is correct. Right now they would have to use either comparative hearings where anyone who wants a license comes in and says, give it to me because I am better in some sense; or lotteries.

For the cellular field, they started out doing comparative hearings for the first 30 markets. To get the license actually awarded under our system, you have due process; it is a trial, basically-and the distinctions became so arbitrary, the technology became more well-known, the proposals became known, and what the commission was looking for became well-known, that they decided to abandon that after the first 30 markets and have used lotteries.

The lotteries were a lot quicker, but when they initially adopted them, they were sort of a secret; no one quite knew about them. Shortly the word got out and, the applicants went from the tens to the hundreds to the thousands to the tens of thousands.

If they were to do lotteries for PCS, I think we would all be submitting, our applications because it is free money. The way it worked out is those licenses for cellular would be awarded, and they would walk out on M Street and sell the license the next day to someone who really wanted to operate the system.

In our view, it is better to have a straightforward auction. There is an active market for licenses with significant economic valve. Our estimate of the value of the current cellular licenses is about $80 billion; and that is a fairly conservative estimate.

Mr. SKAGGS. And we gave that away?

Mr. SUGRUE. We gave that away. Now, it may not have been worth $80 billion when given away, but it was still worth quite a bit. I think the $4 billion estimate is fairly conservative, myself.

Mr. SKAGGS. What do other countries do with their spectrum? Do we have some models to look at along the bidding line?

Mr. SUGRUE. A number of countries that are moving in that direction are New Zealand and Australia. In the U.K., they have bidding for broadcast licenses.

Mr. SKAGGS. Well, if I can interrupt, I assume your role, as opposed to the FCC's role here, is to try to develop a policy premise for a way to go.

Mr. SUGRUE. Right.

Mr. SKAGGS. So I am just probing, since they have got to do the operational side, that you are trying to give them policy support?

Mr. SUGRUE. That is correct. And part of our initiative would be to do some empirical economic research on different techniques and different ways that competitive bidding could be done.

They would have to write a set of new rules to implement competitive bidding. They don't have the authority now, so they don't have the existing set of rules to do it.

Mr. SKAGGS. And we don't have the legislation drafted yet?

Mr. SUGRUE. There is legislation pending in the Senate that would authorize competitive bidding under certain circumstances. Legislation has passed the House. There hasn't been anything formally submitted by Commerce, but we have provided comments on both the House and Senate bills.

Mr. SKAGGS. But since the administration has anticipated this revenue, is there going to be an administration legislative proposal to set up the parameters for a bidding process?

Mr. SUGRUE. As I understand it, there will be. We have drafted such legislation. OMB, as I understand it, is also talking with Energy and Commerce Committee as to whether to move the process along, or if it would be better for the Administration to submit its own bill, or whether they want to propose a bill.

Mr. SKAGGS. If I can, Mr. Chairman, just go back briefly to the NII set of issues, or the standards-setting dimension of this. And I may be off base, but my feeling is that there is a central justification for a governmental function in this right now. But how do you make sure that we don't end up with a lot of privately developed systems out there that in fact can't be efficiently integrated?

Maybe that is a relatively cheap piece of the action that you are anticipating, but I just wanted you to elaborate a bit on the critical nature of that, if I see it correctly; and then what the interrelationship is between your work and NIST's work in dealing with the standards and interconnection of hardware and software.

Mr. SUGRUE. Well, you are right on target in appreciating that standards work is critically important. In terms of the dollar amounts we are asking for in this initiative, it is not as big as the grant program, which takes most of the money, to actually get facilities constructed.

But we have two activities that are part of the overall program that are standards-related. One is in the international area, in which we are requesting for $1.4 million to enhance our ability to participate actively and effectively in international conferences, dealing both with radio spectrum allocation and standards setting.

The second initiative requests, an additional $700,000 to assist our lab at ITS to enhance its ability to work in the standards area, particularly dealing with interconnection and interoperability.

Some of us still lapse and talk about the network as if it were a single network and Ma Bell was still running it which is really a 1970's concept; and it really is the network of networks now, and interconnection and interoperability are increasingly important and demanding. I would note that two major private sector groups-one from the computer industry, Mr. Scully is the spokesperson for, and most recently one from the telecommunications industry, with 14 CEOs of all the major local exchange carriers in addition to all the major service providers, i.e. AT&T, and Sprint, almost never get to sign the same piece of paper unless it is a lawsuit. They signed a statement supporting the President's initiative in building a national information infrastructure, applauding the vision in that area, and identifying what is viewed as appropriate roles for government.

One of them was to facilitate the standards process; and in particular in the areas I mentioned-interconnection, and interoperability.

Mr. SKAGGS. It would seem to me that, to the extent there is a long hole in the government's tent piece of this, that is it; and the grant function could wait a year or two without being a disaster. But if we don't get mutually acceptable standards on connections or systems in place early on, that could, in turn, delay an awful lot of progress. I just want to make sure that if we have to pare back somewhere, that we correctly identify what absolutely meets the priority in this area from your point of view next year.

Mr. SUGRUE. Well, I understand that, and it is very critical. I am not in a position right now to say which of those is more critical than the other, or which of my children we will push aside for the moment, push away from the table. But I will, as I said, review that.

Mr. SKAGGS. You are not going to contradict my assertion?

Mr. SUGRUE. That is correct.

Mr. SKAGGS. Thank you very much. I appreciate you gentlemen yielding.

Mr. SMITH of Iowa. All right.

Mr. Mollohan?

FCCSET PROCESS

Mr. MOLLOHAN. Is the agency a part of the FCCSET committee?

Mr. SUGRUE. Not directly at this time, but OSTP, which oversees FCCSET is coordinating the NII. The FCCSET initiative for HPCC is also contributing to the development of the NII. We also participate in another group called the Federal Networking Council. In addition, this year we have an initiative, totaling $500,000 to enhance NTIA's ability to participate in NREN development which is an important component of the FCSSET HPCC initiative.

Mr. MOLLOHAN. Well, as I understand it, FCCSET is going to be setting the priorities and defining a lot of the government's involvement in this regard. It is curious to me that you are not a part of FCCSET, particularly if you are going to play a significant role in infrastructure as you just indicated.

Mr. SUGRUE. I think we are moving to becoming a part of it. A lot of acronyms here. There is the HPCC which is a subset of FCCSET, which is the high performance computing part of what FCCSET does, and within HPCC there is the networking component.

I agree with you. Through this initiative we will increase NTIA's involvement, in FCCSET. We will also become more involved through our NREN initiative. As the NREN build upon the Internet, and becomes more and more a part of our infrastructure, rather than just a specialized network among government agencies and a few little private users or academic institutions, it is increasingly running into policy issues.

The people involved in that community are very anxious to have our input on NREN. They aren't comfortable dealing with things like what is the appropriate use and what is the relationship between commercial carriers and what they are doing and what sort of activities should they do, what should commercial carriers do, what are the limitations in terms of, for example, regulation or the AT&T antitrust decree on what activities commercial carriers can participate in.

So there is a demand for us to be involved, and then further, with our enhanced involvement——

Mr. MOLLOHAN. You mean there is a reason for you to be involved?

Mr. SUGRUE. Yes, there is a reason. A demand, meaning that people want us to be involved in it. And then from this new initiative, actually, we are awarding grants for the last mile, as we say.

Mr. MOLLOHAN. You mean the NII?

Mr. SUGRUE. Yes. We think we obviously need to have a much greater involvement in those activities.

Mr. MOLLOHAN. That would really trigger your involvement with FCCSET wouldn't it? That is, if you receive an appropriation of these NII grants, is that correct?

Mr. SUGRUE. That is correct.

Mr. MOLLOHAN. Have you been talking with NSF at all about the NREN program—what role would you play in it?

Mr. SUGRUE. I was on a panel this week with Steve Wolf, the NSF Director for NSF's communications programs. We have been talking at the staff level and had presentations as to what we are proposing to do and how we would interrelate. Part of this initiative is the $500,000 for NREN.

Part of this initiative is the $500,000 component for enhanced involvement in NREN planning and policy which would enable us to intensify those efforts. We would work with NSF to implement this initiative.

NATIONAL INFORMATION INFRASTRUCTURE

Mr. MOLLOHAN. Following up on the Chairman's questions and Mr. Roger's questions about how all of this system is going to work. If you would, please summarize how you see the overall architecture working, and how the FCCSET committee membership will play in this architecture, and how you might complement this ongoing activity.

Mr. SUGRUE. Well, let me——

Mr. MOLLOHAN. And I am talking about DOE, NASA, NSF, and so on.

Mr. SUGRUE. Let me take one brush at that and maybe ask Dr. Rush, who has been representing us in those committees, to address it a little bit more.

Mr. MOLLOHAN. Okay, sure.

Mr. SUGRUE. A lot of those activities were generated by Federal agencies that are major users of computing and communications technologies. As some of those networks evolve, they are now becoming much more widespread, like the Internet, and eventually we think the NREN, the high-speed data network. NTIA is not a major user of supercomputers—we don't run our own supercomputer, we don't run our own network the way NASA does, or the way NOAA does. We see a need and a desirability on policy grounds for us to get involved; and then on—as I said, because it would be giving these grants for others to sort of hook into these to be involved.

Mr. MOLLOHAN. Do you expect your agency to play a role in creating access to the various agency networks, for example? And in that regard what role will the private sector play and what role will your grant program play?

What I really am looking for is a perspective on what the overall architecture will look like. For example, who will you connect to the network—all academic institutions, including kindergarten through graduate school? The Federal laboratories? I mean, can you give me some idea of what the highway is supposed to look like?

Mr. SUGRUE. Go ahead, Dr. Rush.

Mr. RUSH. Well, Mr. Congressman, as you have indicated, there is a blurring at this point in time as to exactly what it is that this overall national information infrastructure is going to look like. There are a number of agencies that are participating through the FCCSET activity, and in particular, the work is being done on the NII as part of what we call the HPCC, the High Performance Computing and Communications Information Technology Subcommittee that is part of the FCCSET.

Mr. MOLLOHAN. Does FCCSET have the mission to bring clarity out of this blur?

Mr. RUSH. Yes. And what this particular Subcommittee has done is that it has taken upon itself the responsibility for bringing what it calls the NII into the HPCC activity.

Mr. MOLLOHAN. Who has responsibility for doing that, this subcommittee?

Mr. RUSH. This Subcommittee, which is part of the FCCSET process.

Mr. MOLLOHAN. A FCCSET subcommittee.

Mr. RUSH. Yes, that is correct.

Mr. MOLLOHAN. So this $51 million is especially important?

Mr. RUSH. This $51 million, Mr. Congressman, is especially important to the people who are working right now to develop the overall vision of what the NII will ultimately be. Most of the people who have thus far been involved in the FCCSET activities are individuals who are looking at the high end of the network, the development of the high-speed, high-capacity gigabit, billions of bits per second, computer-to-computer—supercomputer-to-supercomputer backbone network.

There is a realization that what we are doing is creating a network that is serving nothing more than researchers in government, academia and industry. We are running the risk of creating an information elitist society that has limited access to what the network can provide. We fit into this by providing the access to that network. That is where the NTIA grant program fits. It is very, very timely that we have been called into the FCCSET and, the HPCC communities in order to assure that the information that is going to be transmitted back and forth along the highway is available. I don't mean to sound denigrating but this information should also be available to the common people, and not just to a bunch of government or academic researchers that are interested in moving bits back and forth because it seems to be a neat thing to do.

Mr. MOLLOHAN. So you are going to be in the dissemination business?

Mr. RUSH. We feel that that is an extremely important part of our role to help stimulate the NII.

Mr. MOLLOHAN. Are you far enough along in your thinking to tell us which will be the first community to receive this information? What is the second or will you do it simultaneously?

Mr. RUSH. I could not presume to say that we are far enough along in our thinking to answer your questions specifically. However, our program, as has been described, is targeting what we think are those social functions that government has historically supported.

Mr. MOLLOHAN. Education?

Mr. RUSH. Education, health care, day care, those are the kinds of projects we envision.

Mr. MOLLOHAN. Day care?

Mr. RUSH. Educational day care or headstart type programs.

Mr. MOLLOHAN. Okay.

FY 1994 NII GRANT PROCESS

Mr. MOLLOHAN. Mr. Rogers talked a bit about the granting process. Could you elaborate on that a bit? If you were to receive appropriations for NII in fiscal year 1994, how would the granting process move forward?

Mr. SUGRUE. For that, I will turn it over to Mr. Connors in a minute, but the system has been that we have an annual grant cycle in which applications are due by a date early in the calendar year. Those are then reviewed in terms of meeting a baseline. If they get into the eligible pool; they are then evaluated by PTFP staff. Next, they are evaluated by outside panels we bring in to find out how feasible they are.

We have certain traditional criteria, particularly in the broadcasting area, and we will need to consider establishing priorities. For example, do we want to do that by rule? Do we want to do that informally? Should the focus be on K through 12 in the first year? Should the focus be somewhere else?

The grants are then typically issued late in the fiscal year, under our grant cycle. We will have to examine that. It doesn't mean that if that is the way we did it with the other program, we will do it the same way. But I think our present thinking will be to anticipate an annual grant cycle and a competitive filing of applications.

Mr. CONNORS. From my perspective, there are two things that will go into the planning grants and the construction grants in Fiscal Year 1994. We will probably solicit States and other entities, because there could be a national organization, such as library organizations or broad-based educational organizations, who may also come in and say that they can see how to solve some of these network problems through planning on a national basis or a State basis; and you would give the incentive to the States to come in and try to say that they want to do specific planning. And that planning can go and build upon what they have already been doing, but try to look at perhaps a statewide network or a regional network and say, these are the needs that they have in the States.

Mr. MOLLOHAN. Would you anticipate that a lot of the first $51 million would go to planning grants?

Mr. CONNORS. A substantial amount could go to planning, because I think statewide planning grants could probably range from $200,000 to $750,000 if you include the type of planning that means that you analyzed all the various groups within your State such as the community colleges, the hospital services, the community services that may want some information from the government. But you would have to leave it up to the States or to other organizations to decide if they need that type of planning.

It could also include the engineering type of costs that would say how you should actually configure these type of networks.

So a substantial amount of money could be spent for planning, but I think you would have to leave it up to the applicants themselves to decide how much they would come to us and apply for. Then we would balance that against the construction type of money, and the equipment money that we would want to give out.

I think, as Mr. Sugrue indicated, we are also looking for training money, maybe not the training money of teaching teachers how to teach, but to teach them how to use the equipment, how to gain access to the networks. A lot of that is still foreign to folks out there.

And then you would focus on those groups who would have the best need in the community. It might be the library community, who is used to using data, and they may come to us with some innovative ideas about how to use data. It may be the educational institutions, for example the distance learning folks in a rural community for which, maybe satellite technology would be the best way to go. Others might say, we need a combination of technologies. We need a connection to Internet, distance type learning capabilities from a foreign area, and we need to connect our schools through some internal microwave type of system.

So I think our focus would be on what the users need, and for us to develop a competitive procedure.

Mr. MOLLOHAN. Would you anticipate coordinating your grant program with other agencies?

Mr. CONNORS. I would hope so.

Mr. MOLLOHAN. It looks like there will be several agencies receiving money for related activities. A coordinated effort would maximize its efficient and best use.

Mr. CONNORS. I think so, too. Like the Department of Education, we have had a lot of experience in distance learning in education, and I think that we should coordinate very actively with them, and maybe through the FCCSET Committee or through other coordinating mechanisms. We have had discussions with the Department of Education and with the educational folks at the National Science Foundation. They are all saying let's work together; and I would think that we could formalize those arrangements if Congress decides to appropriate funds.

Mr. SUGRUE. We are really looking to try to leverage this money by hooking into existing networks, publicly and privately funded, Internet being one of them. Another example would be PBS's Telstar satellite, which will be going up later this year and which will have advanced capabilities for delivering video services. There are plans to do some educational things by hooking into this satellite.

To cite one example from an application pending before us, the California State University system has proposed jointly with Pacific Bell to hook up 30 model schools, K through 12 schools into CSUnet which is the statewide California State University network, with high-quality digital lines for hooking up computers. CSUnet, in turn, serves as a gateway to Internet. Internet connects networks like the NASAnet and other networks around.

So through this hierarchy of interconnection, you can bring to K through 12 access to the NASAnet. It is not a line going from their little school over to Houston; it is through using existing capabilities.

Mr. MOLLOHAN. That is pretty neat.

Thank you, Mr. Chairman.

Mr. SMITH of Iowa. Mr. Taylor?

1994 NII BUDGET REQUEST

Mr. TAYLOR. Gentlemen, I know that you pointed out that the evolution of this process would go on without government; in fact, a lot of it has been going on before it was discovered by the White House or anyone else and a great deal of progress is moving forward.

I am perhaps more troubled by the massive spending than Mr. Rogers. You know, Mark Twain said that if the world ever came to an end, he wanted to be in Cincinnati because it would take 20 years longer for it to get there. Coming from a business background, that is how I feel when the government looks over at some innovative program and wants to get involved.

You talked about how the government could be a catalyst. Whenever I see the government creating a catalyst, it usually turns into a lot of bull. For me to think that Washington bureaucrats might be taking taxes from public and private business and putting together regulations rife with pandering to every special interest group they can, and to assume that they are going to be on the cutting edge of anything just goes beyond my belief. I have read material about the Bell systems willing to spend $100 billion in contributions, in creating the national information infrastructure putting the thing forward.

The cable folks got competitive and said they could throw in $90 billion or something to that effect. That is a lot of money. Would it be better for us to stay out of the way?

I would ask that, number one. I presume you were hearing some of the same voices. That is why you asked for $23 billion instead of 94 or thereabouts in your initial effort in this area.

Are we about to get the government in the middle of something where it would be better to watch and try to make it easier for the competitive market and for the private organizations that have worked in this to do many of the things you were talking about—the motivating, the training, the teaching and others? I have seen in many technological programs that the companies that make the equipment or install the equipment, or service the equipment and do other things, do a much better job in trying to train public schools and libraries and others, than the kind of bureaucracy where the government would come in and try to do that training.

I am just wondering, this quadrupling in the request that you originally had—you had some reason for that original request, I am sure. You thought that $23 million would move the program along pretty nicely?

Mr. SUGRUE. The $23 million didn't include any funds in it for this type of initiative, nor any funds for the traditional PTFP program, which represents $20.6 million of our total request. The change obviously reflects the priority the President and the Vice President place on telecommunications and technology as a driver of the economy and an enhancer of quality of life for our citizens and the role government can play in that in a constructive fashion.

In terms of staying out of the way, the response of the private sector to this initiative has been very, very positive. There was some concern particularly initially when some of our rhetoric perhaps was not as precise as it should be, and some suggestion that government might be taking over roles it shouldn't be getting into.

But as I referred to the computer group that Mr. Scully from Apple is the Chair of, and the recent telecommunications group, and again, as someone who has worked in this area for 12 years, getting those 14 CEOs to sign up on a vision for what should be happening in this industry was—is fairly remarkable.

They applaud the President's effort to, one, articulate this national commission infrastructure——

Mr. TAYLOR. And that doesn't cost us anything, except to sell it.

Mr. SUGRUE. No, but there is leadership involved in doing that.

Mr. TAYLOR. Sure.

Mr. SUGRUE. Also, to do a number of things Mr. Skaggs referred to including getting more involved in the standards area to help facilitate their development. Because with multiple providers you need standards for interconnection to assure that the networks work together. We are doing that to ensure what communications policy has traditionally been called "universal service," that traditional needs that might not otherwise be met through the marketplace such as education and health care. I think these areas would be among them and are supported and funded and can share in the benefits of this infrastructure.

Our part of this program, focused on education, health care and on nonprofit entities. From the contacts I have had with the private sector and they have been fairly, fairly extensive on this,—to the extent that there are concerns, that are not focused on our aspect of the Administration's proposal. This seems very well within traditional government functions in terms of supporting education, and health care.

We are involved in education to the tens of billions of dollars. We are involved in health care to the tens of billions of dollars. Providing a means by which these advances in technology can be brought to bear to deliver that mission in a more effective fashion is not getting government into an area where it is best left to the private sector.

If the question is whether the national information infrastructure at large really the domain of the private sector in this country, the answer is yes, it is. I don't think anything the President has proposed would suggest that government is going to take over the telecommunications function in this country. We have an active private sector delivering good services, and the government's role again is not to take that over.

The $50 billion a year I mentioned is what the private sector is doing. Obviously from the amount of money we are talking about, it is not something we are going to claim as our own.

Mr. TAYLOR. I can name a number of sectors where we have had an active private sector at one time delivering goods and services and where the government's heavy hand has put us back to about the level of Nicaragua. I am not saying you are running out the private industry; I am saying that whenever the government wants $71 million more, four times more dollars than it was getting before, it tends to start out, and before long it may be involved with things that it wasn't intending to.

Mr. Chairman, my responsibility is not to look after Apple or Southern Bell or anyone else, but if we are hard up for money, as Mr. Rogers has pointed out, to come up with this extra $70 million, there needs to be a real good case why we ought to be doing it. And from what I have seen—and I am waiting to be convinced, from Time Magazine and others—there is no great cry for us quadrupling our investment to make this progress move along.

There are ways government can help, but we don't need to put the dollars in to make it move along, except perhaps in the stimulus case. You want to spend a lot of money so everybody will think it is your idea or something. But we may be getting in the way at this point.

I can see a real use for the information infrastructure in education and health care and others. This may be better utilized by the government; and the government will probably be late in recognizing it is there and using it. You should let the national information infrastructure go ahead and develop, and then utilize it for those services where the government traditionally is involved, such as social services. I am just one member, but I need a little more convincing on why we need to have these extra dollars to make the wheel turn.

Mr. SUGRUE. Well, Mr. Taylor, I will make one more attempt at convincing you today, and I will be happy to make as many attempts as you would like.

Mr. TAYLOR. Okay.

Mr. SUGRUE. I think the NTIA component is something more understandable to ordinary people and myself as well, than the gigabits flying around and what AT&T is doing and so forth. What we are proposing is for example, if you go out to a school system or a university that has received a grant from NTIA in the past, what you will see is a classroom with a TV screen in it. You will see on top a satellite dish. It might be a receiver dish or a two-way dish depending on what the project was. You will also see instructional material, courses being offered on TV from hundreds of thousands of miles away.

Let me touch on one point you mentioned. Our part of the program isn't so much involved in funding technologies that are on the cutting edge in the sense that they don't exist. Most of what is being put in the school systems, in terms of hardware, is commercially available. There is not enough money for us to fund something esoteric or experimental. That is another part of the program, and I guess I am not the best person perhaps to defend that part of it. What we are talking about is well-developed, well-known technologies that are being used, that have been used for other purposes, but haven't really been brought to bear in, for example, education as effectively as they might.

And in the educational community we see more and more opportunities to sort of use telecommunications to deliver its services, not in a pork barrel way or a wasteful way, but to deliver those services more efficiently, and more effectively.

BENEFITS OF NII

Mr. TAYLOR. It is behind its time, really. I mean, we ought to be a lot further ahead. I am not disagreeing with you. What I am saying is, it has been my experience that the people who sell services to make a living are looking for customers, and they have a real motivation so that they could be turned loose to do the kind of training, the kind of work we are talking about, rather than seeing that become an expense of government.

Mr. SUGRUE. They don't always have the funds. We are not going out there saying, you private sector providers please step aside, and allow NTIA to take care of the job for you. We would give a grant for a million dollars, for example, to buy 10 satellite dishes, the appropriate hardware to hook up 10 more school systems or 10 more agricultural universities to the AGSAT, or the distance learning thing with the Japanese, or a special math course that is not available, but being taught at a college.

There was a fellow from Iowa who visited me who runs a four-year college but who has an arrangement with nine community colleges. Right now the students from those nine community colleges have to drive if they are going to make use of those educational resources. Again, with the telecommunications they can make it seem like those students at those nine remote campuses have access to the teachers, the libraries, and all the facilities of the central system.

Mr. TAYLOR. I don't doubt the benefits. In fact, I recognize the benefits.

I won't take any more time. But, Mr. Chairman, I would like to get more information on your specific expenditures to see how much of your request is going toward actually broadening opportunities; and perhaps we are the wrong committee to be doing it; I don't know. That would be where I would like to look a little more. Thank you.

Mr. SMITH of Iowa. Mr. Moran?

Mr. MORAN. Thank you, Mr. Chairman.

Don't other nations collaborate with the private sector in developing their telecommunications networks—Japan and Germany and so on? They make a rather substantial investment, don't they?

Mr. SUGRUE. Yes. There is very active and very close collaboration in those countries.

Mr. MORAN. I think we all agree, Mr. Taylor, that we don't want to be spending Federal taxpayers' money if we can get private money; but on the other hand there probably are areas that just aren't going to be done or be given a priority unless public money is involved, at least as incentive money. And yet there might be national priorities, for example, of distributing the information capability between and to universities that might not otherwise have access to it.

I have to say, though, that it seems like a little knowledge is a dangerous thing; and I was very much aware of that last week when I read that Time Magazine article, Mr. Rogers, that said we are going to have a virtual video library in every home; and there will be another in the shopping mall as well. We can pick what we want to buy in all kinds of categories, items that we can buy, and it will be a library.

All the information we could get at a local library will eventually be accessible, as long as you have a cable TV or a personal computer; or if you don't want video, well, you can use your telephone.

Unfortunately, the next thing I had to do after finishing the article was to speak to the Friends of the Libraries of America, about 500 people at the Cannon Caucus Room, and I told them how it appeared that the libraries, as we know them today, will soon be a relic of the past, and that their principal function will be to operate computer networks, unless in affluent communities they want to try to compete with the Border Book Shop, where you have better surroundings, where you can sit back, and enjoy feeling a book, and so on. But it wasn't well received, needless to say.

I am not even sure I was right. But it seemed kind of exciting.

Let me try a concrete example, too, of how your program might enhance telecommunications. We have a network, an existing one now at Johns Hopkins University up in Baltimore, Maryland, and one in George Mason in northern Virginia. I think they tap into some of the Federal agencies. I think it is part of this Internet.

Mr. SUGRUE. Most likely they are connected to Internet.

Mr. MORAN. So is that the kind of thing where you would facilitate tapping into another, for example, and into the Library of Congress and other Federal agencies, such as HHS—for what the Johns Hopkins School of Medicine is doing? In other words, you would be expanding an existing network by integrating it with major agencies?

Mr. SUGRUE. Yes. That would be a good example. Because, in terms of educational application, it would build on existing infrastructure. That is, it wouldn't be a proposal to build a separate network and it would utilize other investments and facilities the Federal Government, the State governments and the private sector have made in information and telecommunications in extending that capability to other schools or to K to 12 schools in the area.

Again, you wouldn't build a separate network for K through 12. It would be done most likely the way the California proposal is outlined, for example. It might be a connection from Virginia's K to 12 schools into a Virginia State system run by the universities and tend to be, for obvious reasons, more sophisticated right now in their use of telecommunications. It will then serve as a gateway to the Internet, which would serve as an entry to Federal agencies, or the Library of Congress, that would build on one network to another, which is the beauty of telecommunications networking.

The reason we can pick up a phone and reach literally billions of phones around the globe just by dialing; it is the hierarchy of networks.

Mr. MORAN. And eventually you want to integrate all these networks?

Mr. SUGRUE. Not integrate in the sense of making them one network.

Mr. MORAN. But give them access.

Mr. SUGRUE. Control and direction, that is right.

Mr. TAYLOR. Would the gentleman yield? This could be helpful to our legislative branch subcommittee, and I am working on the Library of Congress request. I see enormous benefits. What is troubling me is, wouldn't it be better to come to us with a plan and a price tag and then have Congress fund it, rather than have us throw $70 million out on the table and say, let's see what you can do with it?

It may take many millions more to do. It may be that you start with a pilot program, and then I would want to have a say, certainly, in where the pilot program was, so that we could get a good comprehensive sampling.

That is what is troubling me. We are sort of putting the $70 million out. And I see what you are saying, sir.

Mr. MORAN. I think this is a useful colloquy, but if they don't have the feeling of use or lose, if they can say this money is available for both the private and the public sector, universities and so on, to apply for these funds; and see what comes in, see what the entities out there are willing to do, and as long as they don't feel any necessity to dump the money, just to get it spent so that they won't be cut the following year, that may be the best chance.

They don't have such control of it that they can determine what grants are going to come in, but if it is too small an amount, a lot of organizations aren't going to bother with it. But we probably have to offer some kind of an incentive to see what types of initiatives might be out there.

Mr. SUGRUE. Yes. If I could just add one concern we have, Mr. Taylor, and it goes to some of the concerns you have about government deciding that this is what the infrastructure will be.

We are sitting here in Washington; and I am the Deputy Administrator, and I know what the infrastructure should be. A different approach to this would be to say we are going to fund this particular technology, this particular interconnection, and here it is, and it will cost this much; it is going to be 2,700 miles of fiber-optic connection, and it will have, 10,000 personal computers and so forth, down the list.

We are, at least under our division of this, looking to the user communities who in this case, are school systems, and health care providers. We are aware of some of the things that are out there; we are not sitting back there like we don't know what is going on, but we want to allow them to come up with their proposals, because it is not just one technology.

There are some school systems out there, or some needs out there, that are better answered by satellite networks, that reach long distances. But at least right now they are typically one-way in terms of the video services they deliver. There may be other school systems that see a greater need for computer activity for things like a university system and to an Internet. We are letting them decide and develop the proposals in connection, typically, with private sector people, like Pacific Bell in California, as to how best to use this technology.

We are also developing plans, and supporting proposals that will be a major part of the initiative, particularly early on, as I think Mr. Connors mentioned earlier.

Mr. MORAN. So you are going to be attempting to expand existing networks where there are not networks to help them get developed, and you are also going to be providing money for the development of new technologies. It is not just using existing, but you will give seed money to try to develop new technologies?

Mr. SUGRUE. Yes. That is part of the mission. A proposal that came in said we think either a new technology, or perhaps more even likely given the community we are dealing with, a new application of a technology that has been developed somewhere else would be the type of thing.

Mr. MORAN. Let me ask a little about the base, the original authorization. It is currently the existing authorization, public telecommunications facilities.

I mentioned at the supplemental hearings, I am a little concerned that we not get the PTFP program and say; that is something of the past; that was the 1980s, and now this is the 1990s, a new info highway in public telecommunications. It has become sort of a stepchild. We have a pretty decent public television network. In Virginia they broadcast what happens in Richmond; and they probably do that everywhere. They do it in North Carolina and so on. They take from the State capital, sort of their own State C–SPAN service, although they use very outdated facilities down in Richmond; you know, they are just sort of stringing together what they have.

But with the existing telecommunications facilities, are they going to still be considered a priority of this administration, that they can continue to upgrade their equipment? It is not going to get replaced by the NII?

I see you are nodding, but I want you to say it for the record, because it is tough to show that on the record.

Mr. SUGRUE. Right. The Public Telecommunications Facilities Program for the first time since FY 1981 has been included by the Administration in the budget submitted to Congress, for $20.6 million.

What our proposal allows is continuing that traditional support function for the Public Broadcasting System, and having that would indeed enhance it. Rather than have it have to compete with all this sexy new stuff, the new agenda will have its own pool of funds with a separate appropriation. Indeed, it would enhance the appropriation.

Right now, of the approximately $20 million Congress has been giving us each year for the PTFP program, $4 million has gone to infrastructure projects. Public broadcasting had to compete with these sorts of applications because both uses came out of the same pool.

What we are proposing now is a program dedicated just to public broadcasting; and a separate program for infrastructure so there will no longer be a tradeoff.

We are going to have a difficult time. We have $20 million in funds and $77 million worth of applications before us?

Mr. MORAN. The public telecommunications improvement——

Mr. SUGRUE. For a combination of public broadcasting and infrastructure, educational infrastructure-related projects. It is clearly going to worthy projects, and the two different entities having to balance it is very difficult.

In any event, the proposal for 1994 and beyond is to have a separate appropriation for each program. I think that does reflect the Administration's commitment to the Public Broadcasting System.

The previous Administration's view was that the program really should not be available for maintaining or upgrading the system. It was intended to provide the seed money to get it going. The rationale for zeroing out the program was that the seed money had done its job.

The new administration does not share that view. It does see a need for providing some support for continuing to upgrade and maintain the system.

Mr. MORAN. Well, that is encouraging. I know that WNVC in northern Virginia is awfully anxious to get its equipment upgraded so they can broadcast the State Legislature from Richmond. That is good. I am sure you don't know about the progress of specific grants like that, but it is encouraging to know that you have taken that tack.

The only other thing that I wanted to ask about, and it is still a matter of conceptualizing. In addition to networks, you do plan to have some centers, some main information switching stations, if you will, located around the country? I mean, is that part of the information infrastructure, that you would help build up—well, I guess you understand better than I do what I am getting at, but I am conceptualizing that they can't all be networks, there have to be some sort of centers of data gathering, storage and then dissemination.

Mr. SUGRUE. Right. There are different sorts of databases that can be tapped into. There are different libraries. If you get on the Internet now, you will see a list of libraries around the country.

The second leg of the three-part Administration program in the area is to create so-called "applications," and applications includes the types of things you are talking about.

You are quite right. You have got a superhighway running, and there is nothing at the other end; what good is it? One of the specific areas identified are libraries and other information sources in addition to education.

Mr. MORAN. You wouldn't use the Library of Congress; you would have to create a new center. You are not planning on just tapping in and having the Library of Congress putting in everything——

Mr. CONNORS. You can get the database now. You can get the bibliography information on some of these other networks. You can go to those networks and they give you access because they develop the software to get into the other facilities. That is how it is working.

Mr. SUGRUE. But you can't get every book in the Library of Congress up on your screen.

Mr. MORAN. Thank you very much. It is an exciting concept.

Mr. Chairman?

Mr. SMITH of Iowa. Well, I don't know. We have a lot of questions yet I think, and we can't answer them all this morning. We may need to have you back; I don't know.

Mr. SUGRUE. I would enjoy coming back.

Mr. SMITH of Iowa. There is a lot of copper out there that needs to be replaced with fiber-optics, to start with, and the government is not going to do that.

Mr. SUGRUE. That is correct.

Mr. SMITH of Iowa. And even public television needs to get on fiber-optics. I don't know where we are—I haven't read that Time Magazine article.

I have seen these stations, the equipment is $30,000 to $150,000. That doesn't sound like a whole lot compared to some other things. And in the end, from the way I have been told, actually the use is very cheap. You know, we are talking about $10, $15, $20 an hour—very cheap.

That is the way it is going to have to be paid for. People are going to have to rent the use of the network. Our government agencies are going to have to pay through their individual budgets—like the IRS, and the Defense Department. They are anxious to get on line, too—and it will save them money. It will save them a lot of money because they can, instead of transporting people around to training sessions, they can have one central place.

I know in Iowa we are talking about hooking the 60 armories up. The National Guard and the Reserve can use this to a big advantage for the training sessions. Once they are hooked on, it is relatively cheap.

Anyway, I think there are a lot of questions to be answered yet, and maybe after you have had your proposal before the authorizing committee, maybe we can get a little better look at this.

Mr. SUGRUE. I would be happy to provide that, to come back formally or informally. It is a new program; it is under development. It is an exciting development.

Mr. SMITH of Iowa. Try to tell us exactly what you can do that won't be done if this Federal money isn't spent.

Mr. SUGRUE. We will focus right on that. Mr. Chairman, thank you.

Mr. MORAN. Mr. Chairman, would you ask him what is a "gigabit"?

Mr. SUGRUE. A billion bits.

Mr. CONNORS. Information per second.

Mr. MORAN. A billion bits of information per second is a gigabit, and that is what we are going to be working with?

Mr. SUGRUE. Right.

I don't know whether that will be a gigabit in your home in Alexandria, Congressman. But if you want that virtual reality there, we may have to do it.

Mr. SMITH of Iowa. Okay. Thank you very much.

[The following questions were submitted to be answered for the record:]

NATIONAL TELECOMMUNICATIONS
AND
INFORMATION ADMINISTRATION

QUESTIONS FOR THE RECORD
SUBMITTED BY CHAIRMAN SMITH

Investment Proposal

QUESTION:

What will be the impact on your ongoing operations should this investment package not be funded?

ANSWER:

The Administration intends to work closely with Congress to ensure that the President's initiatives in the areas of Rebuilding America, Lifelong Learning, Rewarding Work, and Health Care are approved in the appropriations process this year. We realize that there will be tremendous pressure on the Appropriations Committees because of the spending caps, however we intend to work with the Congress in every way possible to accommodate substantial initiatives in areas like education, infrastructure, research and development, and job training.

As part of the Administration's FY 1994 investment package, NTIA will participate in two ways: 1) by implementing the National Information Infrastructure grant program; and 2) by conducting related initiatives in the Salaries and Expenses appropriation. Without the NII grant program, educators, health care, and other social service providers will likely not participate in the effective development of the telecommunications infrastructure, which could affect the delivery of health care and educational opportunities, particularly in rural communities.

Without funding, NTIA's involvement in activities relating to NREN, standards, and international conference preparation would be limited. This would affect the overall support provided to U.S. industry which would be detrimental to U.S. global competitiveness.

Spectrum Reallocation

QUESTION:

There are proposals in Congress and from the Administration that require NTIA to transfer 200 megahertz (MHz) of Federal-controlled spectrum to the FCC for distribution to the private sector. Which Federal users will be impacted by these proposals?

ANSWER:

ANSWER:

Legislation has been passed by the House, and is pending in the Senate, that would require the Secretary of Commerce to transfer 200 megahertz (MHz) of Federal spectrum to the FCC for subsequent distribution to the private sector. Under these legislative proposals to reallocate Federal spectrum, NTIA must analyze current frequency assignments and develop a plan to reallocate the spectrum to be transferred. During this process the private sector will be actively consulted and involved in special studies. Until the studies are completed, it is not clear which Federal users will be impacted.

QUESTION:

You are requesting an increase of $400,000 for the spectrum plans and policies activity related to spectrum reallocation. Part of this funding is for travel associated with convening a new private sector advisory committee. Under the pending legislation, what is the purpose of the advisory committee, who will serve on the committee, and how often is the group required to meet?

ANSWER:

The $400,000 is requested to convene and administer the advisory committee, provide for special spectrum studies from the private sector involving spectrum planning and the 200 MHz transfer activities, and provide for a study on designing competitive bidding systems for assigning licenses.

The purpose of the private sector advisory committee, according to the legislation proposed in the Senate, is to: (1) review and obtain public comment on the Federal government's 200 MHz selection contained in their preliminary report and advise the Secretary of Commerce on the spectrum that should be included in the final report (two years after enactment of the Act); (2) obtain public comment on the Secretary's final report; and (3) submit a report (three years after enactment of the Act) to the Congress, the FCC and the Secretary of Commerce containing recommendations for the reform of the process of allocating spectrum between the Federal and non-Federal use.

According to the legislation, the committee is to meet monthly for approximately three years. The committee is to be composed of representatives from manufacturers of spectrum-dependent telecommunications equipments, commercial carriers, users of the spectrum (radio and television broadcast licensees, State and local public safety agencies, amateur radio licensees, and the aviation industry) and other interested members of the public who are knowledgeable about the uses of the spectrum. The

Assistant Secretary of Commerce for Communications and Information, the Chairman of the FCC, and one other Federal government representative as designated by the Secretary are to be included on the committee. The chairperson will be a private sector member of the committee.

QUESTION:

NTIA plans to conduct an experimental study on designing competitive bidding systems for assigning spectrum licenses. Is this study required under the proposed legislation? Why is NTIA, and not the FCC, responsible for conducting this study?

ANSWER:

The proposed experimental study is not required under pending legislation. However, as the President's principal advisor on telecommunications policy and spectrum management, the proposed study would provide a solid basis for NTIA to present a detailed plan, on behalf of the Administration, to the FCC so that it can adopt a competitive bidding regime consistent with the Administration's policy goals.

If spectrum competitive bidding legislation is passed, as is supported by the Administration, the FCC will have to conduct proceedings to implement rules by which such bidding is to operate.

QUESTION:

What are the international implications of the proposed spectrum reallocation from NTIA to the FCC?

ANSWER:

In the spectrum reallocation legislation, Congress finds that the scarcity of assignable frequencies for licensing by the FCC could impede the development and commercialization of new telecommunications products and services, limit the capacity and efficiency of the telecommunications systems in the U.S., and adversely affect the productive capacity and international competitiveness of the U.S. economy. It is to this end that the legislation directs the Federal government to transfer 200 MHz to the FCC for distribution to the private sector. The Administration agrees that spectrum-based technologies will be crucial to U.S. competitiveness in telecommunications, and supports the proposed transfer of spectrum for that reason.

Care will also have to be taken in the selection of the 200 MHz relative to spectrum use internationally. In the selection of the 200 MHz, the Federal government will have to consider U.S. obligations or treaties with the international spectrum community to insure these obligations and treaties are not disregarded. For example, spectrum that is used for air traffic control worldwide as agreed to by the United States could not be part of the 200 MHz since to do so could affect safety-of-life.

Clipper Chip Technology

QUESTION:

The Committee has been made aware recently of the development of the "Clipper Chip" secure telephone communications technology. I understand that the National Institute of Standards and Technology (NIST) was involved in the development of this technology, but did your organization have a role in the Clipper Chip development?

ANSWER:

NTIA did not have a role in the development of the "Clipper Chip." The "Clipper Chip" was designed by engineers at NIST and at the National Security Agency.

QUESTION:

Do you foresee an ongoing role for NTIA and the Department of Commerce in the implementation of the Clipper Chip secure telephone communications initiative?

ANSWER:

The Clipper Chip development has been a NIST responsibility. However, because of the chip's potential effects on the markets for telecommunication products and services, NTIA plans to coordinate closely with NIST in monitoring the chip's acceptance by users and the effects of its use on the delivery of telecommunications to American businesses and residences. The Administration is currently reviewing numerous issues dealing with telecommunications and encryption: security and privacy of communications, law enforcement and national security concerns, and the effective deployment of the most modern technology in our telecommunications infrastructure. A comprehensive policy addressing these issues is to be developed, and NTIA will be participating in that process.

International Telecommunications Issues

QUESTION:

Part of your requested increase -- $1.4 million -- is for enhancing the planning for and participating in international conferences and negotiations concerning telecommunications policy, standards, and regulations. What would be the impact of not receiving these requested funds?

ANSWER:

Currently, NTIA assigns staff to prepare for the various international conferences (radio, standards, and development) on an ad hoc basis; there is no staff permanently assigned to these functions. A limited number of staff are experienced in conference preparatory work, and they carry other responsibilities relating to international telecommunication policy development. Moreover, the number of such conferences is increasing as developments in telecommunications technologies create a strong demand for timely international actions in spectrum allocation, standards, and regulatory policy. If the requested funds were not available, NTIA would be forced to reduce the overall support it provides U.S. industry in advocating their cause at international meetings. In the future, the present ad hoc approach to these conferences will not be adequate to identify and analyze issues effectively, determine U.S. positions (and fall-back positions), and build the relevant domestic and international consensus for U.S. positions.

Also, of great concern is the lack of additional trained staff to address the substantive and technical issues arising in the increasing number of international telecommunications fora other than formal conferences. NTIA is the only Executive branch agency with the in-house technical and policy expertise to participate substantively in these meetings. NTIA currently utilizes the same staff for many of these meetings as it does for the international conference work. This coverage is not adequate to protect and advance U.S. commercial interests: the number of different substantive areas in which U.S. representation is needed now exceeds NTIA's current staff capacity, and the increase in the number of conferences themselves will prevent NTIA from using conference-preparatory staff to cover the other meetings on any sort of regular basis.

The impact of denying additional funding will have a negative impact on the U.S. private sector at the various conferences convened in the mid- to late 1990's (beginning with the 1995 world radio conference). By that time, the lack of in-depth work in the committees and in the individual foreign countries potentially opposing U.S. positions will surface in a conference in which the United States is either unable to muster the votes it needs to advance new, U.S.-developed technologies or is forced to acquire those votes through sacrifice of other interests (diplomatic and commercial) in the international community.

QUESTION:

Is there a particular reason this is experiencing a significant increase for FY 1994? Are additional international meetings being planned?

ANSWER:

In the past, ITU radio and standards conferences were scheduled on an "as needed" basis; the pace of technological and marketplace developments in telecommunications was significantly slower than is the case now and issues tended to arise with relatively long lead times. Moreover, in a number of areas (e.g., standards), AT&T, as the predominant provider of many telecommunications services, was in a position to take a leading role in developing and advocating positions for "the U.S. network."

Now the situation for U.S. policy-makers and industry has changed dramatically. As the result of recent ITU decisions, international conferences will be held every two years. Furthermore, as the result of the break-up of AT&T and the increasing competition in almost all telecommunications markets, there is no single U.S. network and no single member of the U.S. private sector that can, or should, be the "champion" for U.S. positions in international forums.
Under the December 1992 restructuring of the ITU, world radio, standards, and development conferences have been scheduled on an almost continuous basis: radio conferences every two years beginning in late 1993; standards conferences every four years beginning in early 1993; and development conferences every four years beginning in early 1994. Governing body conferences (plenipotentiaries) will also be held every four years.

Each of the major ITU conferences is preceded by (1) meetings establishing the conference agenda and exploring the upcoming conference issues at the regional level; and (2) multiple study group meetings in which technical issues are defined, efforts are made to accommodate multiple views, and positions put forward by different countries. Both categories of meetings offer critical opportunities to gain acceptance of U.S. positions long before the hotly contested grounds of an international conference.

Further changes are expected in 1994 as a result of the 1993 decision of the Organization of American States (OAS) to upgrade its telecommunications specific subgroup, CITEL; the decision to alter CITEL's structure and to increase its budget is to be ratified in mid-1993 by the OAS Assembly. CITEL is the most significant regional organization in the Americas addressing spectrum and standards issues, and participation in its activities will be increasingly important in building the regional support needed for U.S. positions at international conferences.

QUESTION:

What is the involvement of the State Department in these international negotiations? Will the State Department contribute funding and/or personnel to participate in these meetings?

ANSWER:

The Department of State participation in international negotiations varies with the form of negotiation being conducted and the forum under which the negotiations are held. For major ITU conferences and negotiations, Department of State personnel lead the U.S. delegations with NTIA providing the primary U.S. government expertise. State Department usually funds the travel expenses of one NTIA member of the U.S. delegation to these major conferences.

The majority of NTIA's international resources are directed toward activities of the ITU and ancillary multi-lateral organizations with jurisdiction over standards and radio spectrum matters. In these organizations, NTIA's role is substantively different from that of the Department of State (and the FCC) in that it is the sole manager of the government spectrum and has achieved international prominence with respect to its technical standards activities. Each agency has different statutory responsibilities and expertise, therefore coordination is an extremely important aspect of developing U.S. policy positions. However, the actual coordination process varies depending on the nature of the activity.

NTIA routinely coordinates with the FCC and with State Department through regular meetings of the agency principals and deputies. This regular coordination extends to any and all issues of common concern. The three agencies also have a clearly established procedure for joint development of U.S. positions relating to the international satellite organizations, Intelsat and Inmarsat.
For the more significant activities, the coordination process is even more rigorous, including

-- the IRAC, which provides the formal coordination of government agency interests

-- national committees, including both government and private sector interests, focusing on standards and radio matters

-- various ad hoc groups established for specific topics and/or to prepare for specific radio conferences, including formally constituted committees of the IRAC

-- delegation meetings in preparation for every international meetings, including the ITU conferences and its consultative committees. Irrespective of which agency convenes the delegation, the other agencies are able and welcome to participate.

In the development area, none of NTIA's activities are undertaken in isolation. The specific support work in Eastern Europe is funded through AID funds administered by the State Department; the individual missions to countries are planned by the three agencies (State, NTIA and the FCC) in concert and staffed from the agencies and the private sector in accordance with the topic and agency expertise.

QUESTION:

How is NIST involved in these international standards negotiations?

ANSWER:

While NIST is generally not directly involved in the international negotiations that NTIA undertakes and leads, NIST personnel do participate in the preparations for the negotiations and the development of U.S. positions as appropriate.

Public Telecommunications Facilities Program

QUESTION:

For the first time in many years, you are not proposing to eliminate the Public Telecommunications Facilities (PTFP) Grant Program. How will the proposed NII initiative interact with the "traditional" PTFP program?

ANSWER:

The two programs are distinct, yet complementary.

The PTFP program will continue to ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible, that a broad array of technologies are used to improve the effectiveness of distance learning, that minorities and women have increased access and control of public telecommunications, and that blind and hearing-impaired persons participate more fully in society through the use of telecommunications.

The NII program is a key part of an overall program in the technology area designed to ensure that the United States enters the next century ready to compete in the global economy. The Federal commitment to the development of an information infrastructure will provide incentives (directly through matching grant requirements and indirectly through demonstrations of technology and applications) for other public and non-profit institutions to make additional investments for facilities that complement the projects funded under this program.

In FY 1994, NTIA proposes to establish the NII program which will provide states, local governments, universities and school systems, hospitals and other health care providers with the financial support to enable them to take advantage of advanced telecommunications infrastructure technologies. The scope of this program will include telecommunications facilities and services, such as interactive data, voice, and video telecommunications capabilities, for education, health care, public information (e.g., electronic libraries), and other social and community service needs. These projects will take full advantage of the technical advances that are impacting network designs, equipment configurations, and service options. Substantial system growth beyond that possible through direct Federal investment alone will result through the leveraging of Federal funds.

NTIA proposes an initiative that would, beginning in FY 1994 and extending through FY 1998, invest over $600 million in grant award projects supporting both planning and facilities construction or acquisition. NTIA expects that planning projects funded will lead directly to infrastructure construction applications. The planning will include the development of engineering studies and completion of Federal Communications Commission applications that may be required so construction of the proposed systems can promptly begin as soon as funds are available. Infrastructure construction grants should enable schools, hospitals, libraries, etc., to begin realizing the diverse benefits of advanced telecommunications technology. Entities already utilizing telecommunications will achieve interconnection with similar organizations to form new infrastructures. "Last mile" interconnections with already-existing "backbone" systems will take place across the nation.

QUESTION:

What is the current nationwide coverage for both public radio and public television?

ANSWER:

Public television signals cover approximately 236 million people or 95 percent of the U.S. population; approximately 13 million people or 5 percent of the population do not receive a public television signal.

Public radio signals cover approximately 219 million people or 88 percent of the U.S. population; approximately 30 million people or 12 percent of the population do not receive a public radio signal.

QUESTION:

Has NTIA developed a strategy for the extension of public telecommunications services to the 5 percent of the country which does not currently receive public television and radio signals?

ANSWER:

NTIA is engaged in many activities to encourage the extension of public telecommunications services to the unserved and underserved citizens of the United States. NTIA conducted a coverage study in 1989 that identified unserved areas of the country. NTIA annually publishes a notice of availability of funds for the PTFP program in the Federal Register, which identifies the extension of public broadcasting as the first priority of the program. An announcement of funding is also published in trade periodicals for public broadcasters.

NTIA staff provide technical assistance to prospective and deferred applicants to strengthen first service proposals that the applicants plan to submit or re-submit to NTIA. In addition, NTIA staff attend public broadcasting forums across the country to provide advice and assistance. NTIA also generates a list of prospective applicants and annually mails application packages to prospective applicants.

In 1989, NTIA participated on a public radio expansion task force with participants from national organizations and public radio station representatives. The task force published a report in January 1990 which identified the needs of public radio, in particular, a general strategy for the extension of service. NTIA has encouraged applications that address the public radio needs outlined in the report.

QUESTION:

Are there any plans to update the study of public radio and television coverage carried out by NTIA several years ago now that we have updated Census data? What would be the costs of conducting such a study, and how much time would it take to implement a study and provide us with the results?

ANSWER:

NTIA does not presently have specific plans to undertake a formal update of the 1989 coverage study. We estimate that the cost of such an update would be approximately $400,000, and the study would take about 12-15 months to complete.

However, NTIA is attempting to address the need for current coverage information for public broadcasting. For example, based on PTFP grants awarded since 1989, NTIA has informally updated the population figures and coverage areas for public broadcasting. Moreover, if individual public radio and television stations wanted to obtain estimates of coverage in their service areas, NTIA would be willing to work with them to generate such information. For example, if the stations provided the necessary technical data (e.g., transmitter and antenna characteristics), NTIA's research laboratory, the Institute for Telecommunication Sciences, could provide assistance in developing coverage estimates.

PEACESAT and other PTFP Grants

QUESTION:

How much of the funding requested for PTFP is expected to be devoted to PEACESAT?

ANSWER:

The Administration has requested that $400,000 of the funding requested for PTFP in FY 1994 be devoted to PEACESAT.

QUESTION:

Are there any carryover FY 1992 balances for PEACESAT available in FY 1993? Do you anticipate that any funds will be carried over into 1994?

ANSWER:

PEACESAT has a FY 1992 carryover balance of $692,971 available in FY 1993. These funds are anticipated to be expended in FY 1993 to pay NASA for operating the GOES-3 satellite and to support PEACESAT operations. No funds are expected to be carried over into FY 1994.

QUESTION:

What is the status of the development of a long-range plan to continue the operation of PEACESAT?

ANSWER:

NTIA completed a study of long-range satellite alternatives for PEACESAT in December 1992. A copy of this report is attached. NTIA has begun to implement several of the report's recommendations and will provide a report to the Congress at the end of the year.

Children's Educational Television

QUESTION:

You are proposing to continue the funding for the Endowment for Children's Educational Television. What is the status of this program?

ANSWER:

NTIA published a notice of availability of funds for the Endowment on March 19, 1993. Approximately 1,000 application packages have been mailed to prospective applicants. NTIA will award the first Endowment grants before the end of the fiscal year.

QUESTION a:

How many grant applications have been received and what is the dollar amount of these applications?

ANSWER a:

NTIA has received 295 Endowment pre-applications totalling $130 million for FY 1993 consideration. The deadline for submitting pre-applications to NTIA was May 5, 1993. All applicants must submit pre-applications. The deadline for submitting full Applications is July 28, 1993.

QUESTION:

The National Endowment for Children's Educational Television (NECET) is to be overseen by a ten-member Advisory Council on Children's Educational Television, to be appointed by the Secretary.

QUESTION a:

Have the members of this Advisory Council been selected?

ANSWER a:

In September 1992, the Secretary selected ten members for the Advisory Council. Council members are: David V.B. Britt--President and CEO, Children's Television Workshop; LeVar Burton--President, Eagle Nation Films; George M. Fisher--Chairman and CEO, Motorola Corp.; Althea C. Huston--professor of human development and Co-Director, Center for Research on the Influences of Television, University of Kansas; Karen Wise Jaffe--Executive Director, KIDSNET; Geraldine Layborne, President, Nickelodeon; George H. McQuilkin--President and CEO, Churchill Films, Inc.; Terry L. Rakolta--Director, Americans for Responsible Television; Fred Rogers--President, Family Communications, Inc.; and Joe Shapiro--Executive Vice President, The Walt Disney Co.

QUESTION b:

How often will the Advisory Council meet? Does this group have functions other than the administration of the NECET?

ANSWER b:

The Advisory Council has met twice -- September 1992 and January 1993. NTIA anticipates that another meeting will be held before the end of the fiscal year.

The Council, as an advisory body for the Endowment, makes recommendations to the Secretary on issues related to the Endowment and the administration of the program.

Request to OMB

QUESTION:

What was your request to OMB for all appropriations accounts, what items did OMB eliminate from your request, and what will be impact of these reductions on NTIA's operations in FY [1993] 1994? Please provide details for the record.

ANSWER:

	OMB Request	President's Request
Salaries and Expenses	$23.9 million	$21.9 million
Public Telecommunications Facilities, Planning and Construction	$0	$20.6 million
Endowment for Children's Educational Television	$0	$1 million
National Information Infrastructure	$0	$51 million

Included in the OMB request was an adjustment to base of $427,000 to fund the FY 1994 pay raise. However, in an effort to reduce overall government spending, the Administration has proposed that Federal employees forego the FY 1994 pay raise and the adjustment to base was denied by OMB. Also included in the OMB request was $1.6 million to enhance NTIA's research efforts in intelligent network and universal personal communications. Subsequent to the submission of the NTIA budget to OMB, the Administration proposed the National Information Infrastructure (NII) program. One part of the NII, which will be administered by NTIA, will provide grants to assist states, local governments, universities and school systems, hospitals and other health care providers, and other entities to purchase equipment and undertake the planning needed to ensure the effective development of the telecommunications infrastructure.

Administrative Savings/Other S&E Issues

QUESTION:

How is NTIA impacted by the President's executive orders on administrative savings and reductions of Federal positions?

ANSWER:

The FTE reductions for Commerce were taken through a combination of actions including eliminating unneeded FTE due to completion of the 1990 Census, reducing PTO FTE based on revised requirements, eliminating FTE no longer required for reimbursable programs, and eliminating FTE associated with program reductions. The balance of the FTE were taken out as across-the-board cuts in areas not included in the President's investment programs. NTIA was one of the bureaus included in the President's investment program, so it was exempted from both the administrative savings and FTE reductions for FY 1994 with one exception. The PTFP program took a $91,000 reduction in FY 1994 for limits on grant overhead. Therefore, there is no significant impact as a result of the President's Executive Orders on NTIA in FY 1994.

QUESTION:

You are including in your request, as an adjustment to base item, $593,000 for "continuation of the 1993 operating level" as approved by Congress. Could you be more specific about this requirement? What object classifications are included in this amount?

ANSWER:

The FY 1993 President's budget requested $893 thousand for adjustments to base. The FY 1993 appropriation approved by Congress of $17.9 million allowed only $300 thousand in adjustments to base of the $893 thousand in adjustments to base requested. The FY 1993 appropriations bill included language enabling the Secretary of Commerce to transfer funds, under specific conditions, between Commerce appropriations. The Secretary authorized, and Congress approved, a transfer of $593 thousand from NTIA's PTFPC appropriation to NTIA's Salaries and Expenses appropriation to restore the President's requested FY 1993 base program. The adjustment to base request of $593 thousand in the FY 1994 President's budget is a permanent restoration of the transfer authority approved in FY 1993, which includes the full year cost of FY 1992 and FY 1993 pay related increases.

Status of Authorization

QUESTION:

What is the status of your authorization legislation for FY 1994? Other than the proposals discussed earlier, what significant changes do you anticipate in your authorizing legislation?

ANSWER:

The authorization for the Salaries and Expenses appropriation expires at the end of FY 1993. NTIA is currently drafting authorization legislation for the Salaries and Expenses appropriation for FY 1994 and FY 1995. The Public Telecommunications Facilities Program and the Endowment for Children's Television are authorized through FY 1994. NTIA is also drafting authorization legislation for the National Information Infrastructure program.

THURSDAY, APRIL 22, 1993.

ECONOMIC DEVELOPMENT ADMINISTRATION

WITNESSES

CRAIG M. SMITH, ACTING ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT

DAVID L. McILWAIN, ACTING DEPUTY ASSISTANT SECRETARY FOR PROGRAM OPERATIONS

LEON T. DOUGLAS, ACTING DEPUTY ASSISTANT SECRETARY FOR PROGRAM SUPPORT

JOSEPH M. LEVINE, CHIEF COUNSEL

DAVID F. WITSCHI, DIRECTOR, ECONOMIC ADJUSTMENT DIVISION

VINCE GOODMAN, BUDGET OFFICER

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH of Iowa. The second item we will consider this morning is the fiscal year 1994 request for the Economic Development Administration within the Department of Commerce. This agency has been around for a long time, so we are pretty well acquainted with the history of it and what has happened over the years. I think at one time it was about $750 million, and then it was proposed to be eliminated. We got down to what we thought was a minimum program, and now we finally have a proposal to continue the program instead of eliminate it, and for some increase. The total FY 1994 request is $253,301,000, including: $223,150,000 for the Economic development assistance programs (program grants), an increase of $6,150,000 over the amounts appropriated for FY 1993; and $30,151,000 for the Salaries and Expenses account, an increase of $3,033,000 above the amounts originally appropriated in FY 1993.

We will insert the justification material submitted in support of this request into the record at this point.

[The justification follows:]

Department of Commerce
Economic Development Administration
BUDGET ESTIMATES, FISCAL YEAR 1994
CONGRESSIONAL SUBMISSION

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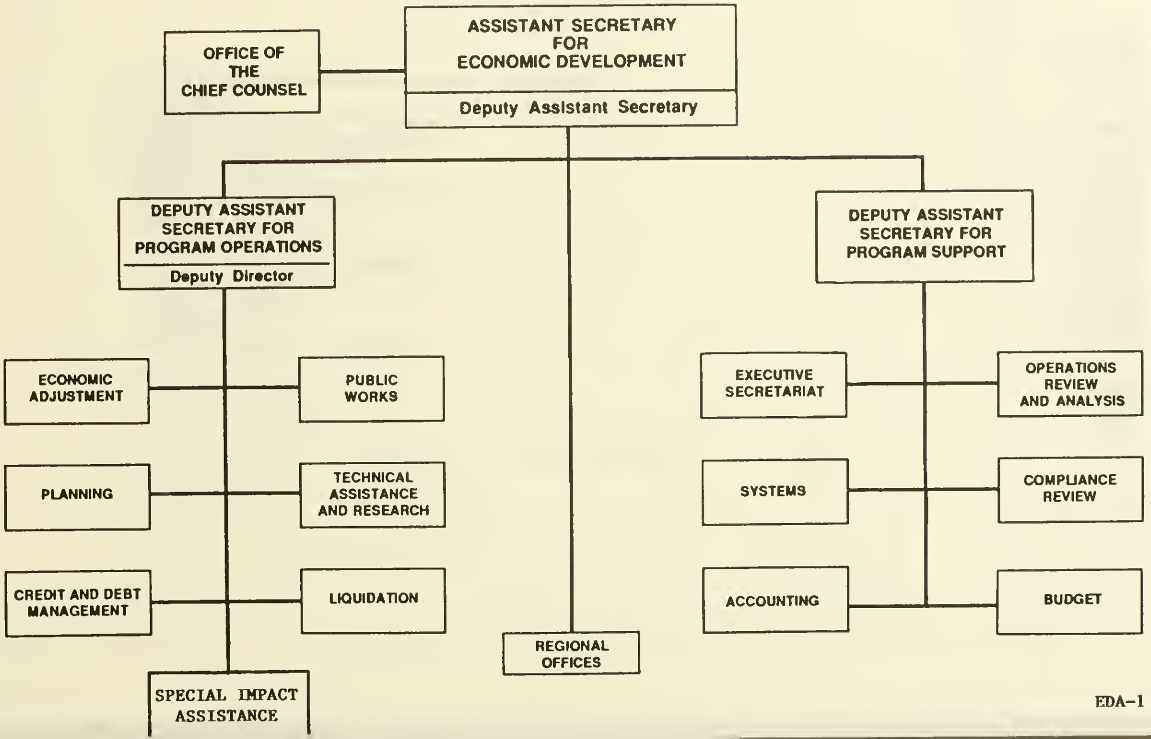
APRIL 1993

U.S. DEPARTMENT OF COMMERCE
Economic Development Administration


ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
Deputy Assistant Secretary
OFFICE OF THE CHIEF COUNSEL
DEPUTY ASSISTANT SECRETARY FOR PROGRAM OPERATIONS
Deputy Director
ECONOMIC ADJUSTMENT
PUBLIC WORKS
PLANNING
TECHNICAL ASSISTANCE AND RESEARCH
CREDIT AND DEBT MANAGEMENT
LIQUIDATION
SPECIAL IMPACT ASSISTANCE
REGIONAL OFFICES
DEPUTY ASSISTANT SECRETARY FOR PROGRAM SUPPORT
EXECUTIVE SECRETARIAT
OPERATIONS REVIEW AND ANALYSIS
SYSTEMS
COMPLIANCE REVIEW
ACCOUNTING
BUDGET

EDA-1

Department of Commerce
Economic Development Administration
Budget Estimates, Fiscal Year 1994
Congressional Submission

EXECUTIVE SUMMARY

The Economic Development Administration (EDA) authorized by the Public Works and Economic Development Act of 1965, as amended, provides grants for public works and development facilities, planning and coordination and other financial assistance needed to reduce substantial and persistent unemployment in economically distressed areas. In 1994, EDA will continue to encourage projects that maximize the utilization of the Nation's manpower and capital, protect the environment, and alleviate the adverse impact caused by technological changes, structural decline, economic dislocation, and natural disasters.

GOALS OF THE AGENCY

The goals of the Economic Development Administration (EDA) are to:

- Improve economic development planning, coordinating and implementing capabilities and activities at all levels-Federal, State, regional, substate-district, and local. At the Federal level, EDA, as a member of the President's Economic Adjustment Committee, will work to coordinate programs aimed at assisting communities impacted by defense related cutbacks. The Secretary of Commerce, in his role as a member of the Economic Security Council, will look to EDA for support in formulating the Department's and the Administration's economic agenda.

- Encourage the rehabilitation of areas experiencing long-term deterioration.

- Support development that makes the best possible use of the Nation's total supply of manpower and capital and, at the same time, protects the environment and conserves our natural resources.

- Help areas needing development achieve lasting economic improvement.

- Alleviate the adverse impact on both places and people caused by technological changes, structural decline, economic dislocation, and natural disasters.

- Provide an opportunity for the participation of all citizens in the economic processes of our society.

To achieve these goals, EDA is requesting $30.151 million in salaries and expenses and $223.150 million in economic assistance, of which $33 million is part of the Administration's investment strategy. The investment request is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package. Funding for EDA's economic assistance programs is as follows:

- Planning grants ($24.770 million) to encourage and support local development organizations with the mission of empowering states and communities to design and implement effective economic development policies and programs.

- Technical assistance grants ($10.420 million) to provide for local feasibility and industry studies, management and operational assistance, natural resource development and export promotion. At the national level, grants will provide for studies of topical issues such as technology transfer and business financing. In addition, EDA provides funding for a network of University Centers.

- Development grants ($135.385 million) to provide for infrastructure projects that foster the establishment or expansion of industrial and commercial businesses providing long-term employment to the unemployed or underemployed residents of communities experiencing high unemployment, low per-capita income, and outmigration.

- Economic adjustment grants ($19.075 million) to provide a package of assistance tools to help communities counteract either a gradual erosion or sudden dislocation of their local economic structure.

- Research, evaluation and demonstration funds ($0.500 million) to support studies of national and regional economic and industrial trends that will increase knowledge about the causes of economic distress and approaches to alleviating such problems and that will foster regional productivity and growth.

- Defense economic investment grants ($33.0 million) to assist communities to readjust to Defense downsizing by making available a full-range of economic development tools directed towards both on and off-base usage.

These programs remain effective mechanisms for addressing economic development issues, opportunities and problems and for promoting partnerships between business, industry and government that create high quality jobs. Grantees are encouraged to use EDA funds to leverage private and other public sector resources (including those of other Commerce and Federal agencies) for implementing their economic development programs and projects.

STATEMENT OF OBJECTIVES

Under its broad and flexible authorizing legislation, EDA is positioned to address a number of local, regional and national issues: 1) Defense Conversion; 2) Innovative Infrastructure; 3) Sustainable Development; 4) Economic Development Cooperation; 5) Industrial Modernization and Retention; 6) Global Economy; and 7) Financial Innovations and Entrepreneurial Development.

EDA has funded projects in each of these areas; however, the Agency has been unable to undertake initiatives that would have resulted in the analysis and dissemination of the findings on a widespread basis. During FY 1994, EDA will seek to disseminate these and other findings to assist economically depressed areas with a particular focus on those communities adversely affected by the military drawdown. In addition to strengthening its institutionalized delivery capacity, EDA will reevaluate its existing functional alignment, the distribution of staff, and the regulations and authorizing legislation governing EDA programs.

As a first step in functional realignment, EDA is proposing the termination of direct grant assistance provided through its Trade Adjustment Assistance (TAA) Program. Technical assistance required by firms and industries adversely affected by imports will now be provided by other Commerce programs and the Small Business Administration. To ensure the success of this initiative and to coordinate the efforts of the various Federal agencies, the TAA staff will be reassigned to the Special Impact Assistance staff whose responsibilities will include, among other things, the provision and coordination of technical assistance in the areas disaster assistance, defense economic conversion, and other industry adjustment assistance. As discussed below, EDA will also realign staff in other areas.

In FY 1982 and FY 1992, respectively, Congress discontinued funding and authority for EDA's direct loan and loan guarantee programs. During this period, residual workload declined at a rate greater than staff allocations. In FY 1994, EDA will begin to realign staff. The goal of the realignment will be to revive defunct analytical and evaluative capacities. Specific attention will be given to increasing the Agency's budget, management, and program analyses functions. For example, in FY 1978 approximately 10 percent of the career staff was engaged in policy development, review, and analysis; today, less than one percent of staff is devoted to these essential areas. As a result, EDA has not been able to maintain up-to-date performance measures nor develop new measures more applicable to today's economic environment. This staff realignment will enable EDA to reevaluate its traditional jobs-impact performance measures as well as expand into more qualitative impact measurements such as: 1) improvement in the provision of public services; 2) increased local economic development capacity; 3) strengthening of the local tax base; and 4) improvement in community spirit including the provision of guidance and advocacy.

Lastly, EDA is reviewing both its authorizing legislation and Federal regulations pertaining to its program. It is anticipated that over one-half of the rules and regulations can either be deleted or substantially modified. The resulting regulations will both reduce the burden imposed on grant applicants and greatly accelerate grant processing. Working with the Department, OMB and Congress, EDA will again submit authorizing legislation. In 1993, EDA will request minor changes to the legislation. Depending on the outcome of EDA's review of its authorizing legislation, additional changes may be proposed.

SUMMARY OF PROPOSED BUDGET CHANGES:

Following is a comparison of the FY 1994 Base and the FY 1994 request with a brief explanation of specific changes:

	1994 Base			1994 Request			Change		
Appropriation/Activity	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Salaries and expenses	375	349	$27,151	375	353	$30,151	0	4	$3,000
Public Works	0	0	135,385	0	0	135,385	0	0	0
Districts	0	0	17,353	0	0	17,353	0	0	0
Indians	0	0	2,901	0	0	2,901	0	0	0
States	0	0	1,933	0	0	1,933	0	0	0
Urban	0	0	2,583	0	0	2,583	0	0	0
Planning	0	0	24,770	0	0	24,770	0	0	0
Local/National	0	0	2,850	0	0	2,850	0	0	0
University Centers	0	0	7,570	0	0	7,570	0	0	0
Technical Assistance	0	0	10,420	0	0	10,420	0	0	0
Research, evaluation and demonstration	0	0	500	0	0	500	0	0	0
Trade Adjustment Assistance	0	0	13,720	0	0	0	0	0	(13,720)
Economic Adjustment	0	0	19,075	0	0	19,075	0	0	0
Defense Economic Investment	0	0	0	0	0	33,000	0	0	33,000
Economic development assistance programs (EDAP)	0	0	203,870	0	0	223,150	0	0	19,280
TOTAL	375	349	231,021	375	353	253,301	0	4	22,280

The increase of $3.0 million in the "Salaries and expenses" account will be used to strengthen budget, program and management analysis capabilities, increase EDA's focus on defense conversion activities and convert and enhance the Agency's ADP/MIS capabilities.

It is anticipated that the Defense Economic Investment level of funding, approximately 15 percent of the total, will be used primarily for implementation requirements resulting from the strategy grants EDA awarded to communities in FY 1992 and FY 1993.

While not apparent in the requested resources one of the most important aspects of EDA's future strategies will be to promote synergism between all Commerce "economic growth" programs and functions as well as with and among other Federal agencies with economic and community development missions. For example, within Commerce EDA will work closely with the National Institute of Science and Technology (NIST) to develop joint projects with EDA providing financial and technical assistance and NIST providing the technological know-how. To strengthen its technical assistance capability, EDA is reallocating $1.2 million from Public Works to local technical assistance. EDA is seeking to restore, through internal reallocation, its Research, evaluation and demonstration program. One example is a comprehensive examination of all defense base closures and conversions over the past 30 years, identifying the factors associated with the success and the failures of communities to adjust. The results will be used to create a base-closure database. Another area under consideration is a study to identify the key factors influencing the decisions of manufacturing plants to adopt new automation technologies. This study will also seek to determine the conditions under which government-sponsored technology programs are most likely to be effective in aiding these decisions.

Lastly, EDA's institutional expertise and national network of development organizations (Planning Districts, University Centers, etc.) will enable the Agency to take the lead in developing and advocating "federal" policy, guidance, and demonstration activities in the field of economic development and adjustment assistance programs.

Department of Commerce
Economic Development Administration
Salaries and expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.:		Positions	FTE	Amount
	Amount Available for 1993 as shown in 1994 President's Budget	375	349	$25,762
	Less (or Plus): Dec. 17, 1992 proposed transfers not approved (allowed by P.L. 102-395)	0	0	0
	Amount Currently Available, 1993	375	349	25,762
EDA-11	Less: Transfers per P.L. 102-395 subsequently implemented	0	0	1,356
	Appropriation, FY 1993	375	349	27,118
EDA-11	Plus: FY 1994 adjustments to base	0	0	33
	1994 Base	375	349	27,151
	Plus: 1994 program changes	0	4	3,000
	1994 Estimate	375	353	30,151

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Comparison by subactivity		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
EDA-16	Executive direction	Pos./BA	22	$1,607	22	$1,488	22	$1,593	22	$1,593	0	0
		FTE/Obl.	21	1,537	20		20		20		0	0
EDA-18	Program operations 1/	Pos./BA	56	3,657	74	4,377	74	4,632	74	4,632	0	0
		FTE/Obl.	56	3,398	69		69		69		0	0
EDA-21	Program support	Pos./BA	65	8,807	65	7,009	65	7,062	65	10,062	0	$3,000
		FTE/Obl.	49	8,685	54		54		58		4	0
EDA-24	Regional operations	Pos./BA	214	13,561	214	12,888	214	13,864	214	13,864	0	0
		FTE/Obl.	206	13,765	206		206		206		0	0
	Total Direct 1/	Pos/BA.	357	27,632	375	25,762	375	27,151	375	30,151	0	3,000
		FTE/Obl.	332	27,385	349		349		353		4	

SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	Adjustments for:											
	Recoveries											
	Unoblig. bal., start of year											
	Unoblig. bal. transferred											
	Unoblig. bal. end of year											
	Unoblig. bal. expiring			$247								
	Financing from transfers:											
	Transfer from other accounts											
	Transfer to other accounts					$1,356						
	Appropriation 1/			27,632		27,118		$27,151		$30,151		$3,000

1/ In order to simplify FY 1992 budget presentation, these amounts are exclusive of budget authority ($2.414 million), obligations ($1.491 million), positions (18), and FTE (16) applicable to account 1320128, "Economic development guaranteed loans." This account was only applicable to FY 1992 consistent with the Credit Reform Act of 1990. In FY 1993, Congress terminated this account and all applicable resources reverted to the parent account 13-0125, "Salaries and expenses."

Department of Commerce
Economic Development Administration
Salaries and expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$27,554	$28,414	$28,801	$31,801	$3,000
Financing:					
Offsetting collections from:					
Federal funds	-169	-2,652	-1,650	-1,650	0
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start-of-year					
Unobligated balance transferred					
Unobligated balance, end-of-year					
Unobligated balance lapsing	247				
Total Budget Authority	27,632	25,762	27,151	30,151	3,000
Transferred to/from other accounts	0	1,356	0		
Sequester	0	0	0		
Appropriation	27,632	27,118	27,151	30,151	3,000

Department of Commerce
Economic Development Administration
Salaries and Expenses
SUMMARY OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	FTE	Amount
Adjustments	0	-$516
OTHER CHANGES:		
1993 pay raise	0	192
Within-grade step increases	0	135
Civil Service Retirement System (CSRS)	0	-14
Federal Employees Retirement System (FERS)	0	25
Thrift Savings Plan	0	4
Federal Insurance Contribution Act (FICA) - OASDI	0	19
Health insurance	0	63
Employees' Compensation Fund	0	36
Travel:		
Per diem	0	10
Rental payments to GSA	0	73
Communication, utilities and miscellaneous charges	0	18
Printing and reproduction	0	2
Other services:		
Working Capital Fund	0	-17
Supplies and materials	0	3
Total	0	33

Department of Commerce
Economic Development Administration
Salaries and Expenses

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Dollar amounts in thousands)

	FTE	Amount
Adjustments	0	-$516

Improved grants administration will result in reduced costs. EDA is in the process of revising its Pre-Application (101P) and Application (101A) forms. After completion, it is anticipated that the revised forms, combined with EDA's goal of eliminating outdated rules and regulations, and its enhanced ADP capabilities, will greatly facilitate grants administration and reduce costs.

OTHER CHANGES:

	FTE	Amount
Pay Raise	0	192

Full-year cost of 1993 pay increase and related costs:

A pay raise of 3.7% was effective January 1, 1993.

Total cost in 1994 of 1993 pay increase	770
Less amount funded in 1993	0
Less amount absorbed	578
Amount requested in 1994 to provide full-year cost of 1993 pay increase	192
Payment to Working Capital Fund	0
Total, adjustment for 1993 pay increase	192

	FTE	Amount
Within-grade step increase	0	135

An increase of $192,000 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases, including merit pay increases, earned in 1994.

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Dollar amounts in thousands)

		FTE	Amount
Estimated number of within-grade step increases	126		
Step increases not earned due to turnover (8.5%)	11		
Average step above step one per separation	4		
Average cost per within-grade step increase	1,457		
Gross cost of scheduled step increases ($1,457 x 126)	$183,582		
Less savings due to separation ($1,457 x 11 x 4)	(64,108)		
Subtotal, personnel compensation	119,474		
Benefits	15,729		
Total adjustment-to-base	135,203		
Civil Service Retirement System (CSRS)		0	-$14

The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 72.4% in FY 1993 to 71.3% in FY 1994 for regular employees. Contribution rates will remain the same. This will result in a decrease of $13,665 in the cost of CSRS contributions.

		FTE	Amount
FY 1994 cost: $17,747,000 x .713 x .07	$885,753		
FY 1993 cost: $17,747,000 x .724 x .07	899,418		
Total adjustment-to-base	-13,665		
Federal Employees Retirement System (FERS)		0	25

The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 27.6% in FY 1993 to 28.7% in 1994 for regular employees. The contribution rate for regular employees will decrease from 13% in FY 1993 to 12.9% in FY 1994.

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

		FTE	Amount
FY 1994 cost: $17,747,000 x .287 x .1290	$657,047		
FY 1994 cost: $17,747,000 x .276 x .1290	631,864		
Total adjustment-to-base	25,183		
Thrift Savings Plan (TSP)		0	$4

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain at 2%.

		FTE	Amount
FY 1994 cost: $17,747,000 x .287 x .02	101,868		
FY 1993 cost: $17,747,000 x .276 x .02	97,963		
Total adjustment-to-base	3,905		
Federal Insurance Contribution Act (FICA)		0	19

As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in FY 1993 to $60,150 in FY 1994. The OASDI rate will remain at 6.2% in 1994.

Regular:	
FY 1994 cost: $17,747,000 x .287 x .062 x .956	$301,895
FY 1993 cost: $17,747,000 x .276 x .062 x .932	283,036
Subtotal	18,859
Other:	
FY 1994 cost: $224,000 x .062 x .956	$13,277
FY 1993 cost: $224,000 x .062 x .932	12,944
Subtotal	333
Total adjustment-to-base	$19,192

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Dollar amounts in thousands)

	FTE	Amount
Health insurance	0	$63
Effective January 1992, EDA's contributions to Federal Employees' health insurance premiums increased an average of 8.0% This results in an increase of $63,000.		
Employees' Compensation Fund	0	36
The Employees' Compensation Fund for the year ending June 30, 1994, is $36,000 higher higher than the bill for the year ending June 30, 1992. The charges will reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.		
Per diem increase	0	10
Effective March 1, 1992, the General Services Administration raised per diem rates. This increase results in a 2.8% increase to EDA. This percentage was applied to the FY 1993 estimate of $349,000 to arrive at an increase of $9,772.		
Rental Payments to GSA	0	73
GSA rates are projected to increase 3.41% in FY 1994. This percentage was applied to the FY 1993 estimate of $2,152,409 to arrive at an increase of $73,397.		
Communication, utilities and miscellaneous charges	0	18
The Washington Interagency Telecommunication System (WITS) telephone conversion will be installed in the Department, converting the Centex switch to GSA/WITS switch. The estimated increase in operating cost is $18,000 due to GSA imposed line charges in the Hoover Building.		

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Dollar amounts in thousands)

	FTE	Amount
GPO Printing	0	$2
GPO has advised us that printing costs will increase 3.7 percent. This percentage was applied to the FY 1993 estimate of $60,400 to arrive at an increase of $2,235.		
Other services: Working Capital Fund	0	-17
A decrease of $17,000 is required in the Departmental Working Capital Fund.		
Supplies and materials	0	3
Based on the GDP deflator of 2.4 percent, the cost of supplies and material is expected to increase by $3,056 from the 1993 estimate of $127,350.		
Total	0	33

Department of Commerce
Economic Development Administration
Salaries and expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
SUBACTIVITY: EXECUTIVE DIRECTION		ers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Assistant Secretary for Economic Development	Pos./BA	9	$708	9	$625	9	$669	9	$669	0	-$0
	FTE/Obl.	8	457	8		8		8		0	0
Deputy Assistant Secretary for Economic Development	Pos./BA	3	230	3	212	3	228	3	228	0	0
	FTE/Obl.	3	399	3		3		3		0	0
Chief Counsel	Pos./BA	10	669	10	651	10	696	10	696	0	0
	FTE/Obl.	10	681	9		9		9		0	0
Total Direct Obligations	Pos./BA	22	1,607	22	1,488	22	1,593	22	1,593	0	0
	FTE/Obl.	21	1,537	20	0	20		20		0	

Department of Commerce
Economic Development Administration
Salaries and expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic development assistance programs

Subactivity: Executive direction

Goals and Objectives

Goals: To manage the Agency effectively and consistent with the intent of Congress and as mandated in statute.

Objectives: To provide essential policy guidance and management to ensure program effectiveness and the maximum utilization of all funds.

Base Program

This subactivity consists of the Assistant Secretary who directs the EDA programs, coordinates the Agency's congressional and public affairs functions and is responsible for the conduct of all economic development activities, including overall direction and coordination of the regional offices of EDA, subject to the policies and directives prescribed by the Secretary of Commerce. The Deputy Assistant Secretary assists the Assistant Secretary in all matters affecting EDA, serves as EEO officer, and performs the duties of the Assistant Secretary during the latter's absence. The Office of Chief Counsel renders legal services to the Assistant Secretary and staff of EDA. The Chief Counsel also has primary responsibility for the preparation, coordination and clearance of all legislation, regulations and external orders.

Department of Commerce
Economic Development Administration
Salaries and expenses

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
SUBACTIVITY: PROGRAM OPERATIONS		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Deputy Assistant Secretary for Program Operations	Pos./BA	6	$468	6	$452	6	$479	6	$479	0	0
	FTE/Obl.	6	423	6		6		6		0	0
Economic Adjustment	Pos./BA	7	470	9	408	9	435	9	435	0	0
	FTE/Obl.	7	434	7		7		7		0	0
Public Works	Pos./BA	14	834	16	738	16	781	16	781	0	0
	FTE/Obl.	14	714	14		14		14		0	0
Planning	Pos./BA	6	397	6	403	6	427	6	427	0	0
	FTE/Obl.	6	404	6		6		6		0	0
Technical Assistance and Research	Pos./BA	9	601	9	628	9	663	9	663	0	0
	FTE/Obl.	9	660	9		9		9		0	0
Credit and Debt Management 1/	Pos./BA	0	0	5	424	5	448	5	448	0	0
	FTE/Obl.	0	0	6		6		6		0	0
Trade Adjustment Assistance	Pos./BA	14	887	15	749	15	793	0		-15	-$793
	FTE/Obl.	14	763	13		13		0		-13	0
Special Impact Assistance	Pos./BA	0	0	0	0	0	0	15	793	15	793
	Fte/Obl.	0	0	0		0	0	13		13	0
Liquidation 1/	Pos./BA	0	0	8	575	8	606	8	606	0	0
	FTE/Obl.	0	0	8		8		8		0	0
Total Direct Obligations	Pos./BA	56	3,657	74	4,377	74	4,632	74	4,632	0	0
	FTE/Obl.	56	3,398	69	0	69	0	69	0	0	0

1/ Funded in the Economic development guaranteed loan account (130128) in FY 1992.

Department of Commerce
Economic Development Administration
Salaries and expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic development assistance programs

Subactivity: Program operations

Goals and Objectives

Goals: Provide, at the national/regional levels, coordinated direction related to Agency's economic development assistance programs.

Objectives: Develop policies and procedures for the effective implementation of all EDA programs and projects; to monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law; to assist the Inspector General's staff with audit closeouts; to monitor the closeout of loans and loan guarantees, and to maximize the timely collections of funds owed to the Federal Government.

Base Program

The Deputy Assistant Secretary for Program Operations provides coordinated direction of headquarter's activities related to economic adjustment, public works, planning, defense economic conversion, technical assistance and research, evaluation and demonstration projects; develops, in conjunction with the Office of the Inspector General, criteria for audits, including adherence to EDA policy and programmatic requirements; develops policies and procedures for the implementation of all EDA grant programs; and provides coordinated direction of headquarters and regional activities related to EDA's direct loan and loan guarantee programs and develops policies and procedures for the administration of Section 202 of the Public Works and Economic Development Act of 1965, as amended. The Deputy Director assists the Deputy Assistant Secretary and performs the duties of the Deputy Assistant Secretary during the latter's absence.

The Economic Adjustment program was authorized by Title IX of PWEDA (Public Works and Economic Development Act of 1965, as amended). It provides grants to local areas to develop and/or implement comprehensive adjustment strategies. These strategies are designed either to anticipate and prevent economic dislocation or to re-establish employment opportunities and economic stability as soon as possible after dislocation occurs.

The Public Works program provides grants for public investment programs authorized in the Public Works and Economic Development Act of 1965, as amended. The staff assures that approved projects support local development objectives and are implemented regionally through effective management procedures. In addition, the staff oversees post-approval management of all public investments to assure that economic development goals are met. The staff monitors the construction, financial, administrative, and statutory aspects of each project on a continuing basis.

The Planning program provides planning grants to states, cities, districts, areas and Indian tribes.

The Technical Assistance and Research program provides grants to communities, non-profit organizations, state and local governments and other eligible applicants to overcome specific economic development problems. In addition, the program conducts external and in-house research and analysis to increase the general understanding of local and regional economic development problems. The external program consists of grants, interagency agreements or cooperative agreements with educational and other non-profit institutions, private businesses, and private individuals. In-house activities include research, review and dissemination, and analyses conducted in conjunction with the contractual research program.

The Trade Adjustment Assistance (TAA) staff provided grants to Trade Adjustment Assistance Centers (TAAC) to assist firms and communities adversely affected by imports; and directed the certification of firms as eligible to apply for technical assistance. In FY 1994, grant assistance will be discontinued.

The Special Impact Assistance staff will provide agencywide support in the areas of trade, disasters and defense economic conversion.

The Credit and Debt Management staff conducts the loan administration of EDA loans and guarantees requiring servicing to sustain or restore EDA projects as viable operations, including modifications of existing loan/guarantee terms and conditions; analyzes and recommends for approval or denial modification actions to existing EDA loan/guarantee terms and conditions. Performs appropriate actions, such as restructuring, refinancing, obtaining new capital, or arranging for takeover by another organization when it is determined to be in the best interest of the government; and overseas post-approval management of revolving loan fund projects. This staff also handles grant and contract "debt" cases.

The Liquidation staff conducts the orderly liquidation of EDA projects acquired at foreclosure or otherwise, to dispose of program assets to the best advantage of the government; directs all liquidation activities concerning the care and protection of EDA's collateral and security position in EDA loans/guarantees; and requests the assistance of, and works with, EDA's Office of Chief Counsel and other Federal agencies toward the orderly liquidation of EDA loans/guarantees.

Department of Commerce
Economic Development Administration
Salaries and expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
SUBACTIVITY: PROGRAM SUPPORT		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Deputy Assistant Secretary for Program Support	Pos./BA	5	$516	5	$379	5	$408	5	$408	0	$0
	FTE/Obl.	4	307	5		5		5		0	0
Budget	Pos./BA	8	3,327	8	2,741	8	2,060	8	2,236	0	176
	FTE/Obl.	4	3,881	5		5		8		3	0
Accounting	Pos./BA	16	692	16	750	16	814	16	814	0	0
	FTE/Obl.	14	608	14		14		14		0	0
Information Systems	Pos./BA	14	3,223	14	1,994	14	2,537	14	4,287	0	1,750
	FTE/Obl.	9	2,804	11		11		11		0	0
Executive Secretariat	Pos./BA	4	140	4	155	4	173	4	173	0	0
	FTE/Obl.	4	143	4		4		4		0	0
Compliance Review	Pos./BA	11	592	11	582	11	628	11	628	0	0
	FTE/Obl.	9	607	9		9		9		0	0
Operations, Review and Analysis	Pos./BA	7	317	7	408	7	442	7	1,516	0	1,074
	FTE/Obl	5	335	6		6		7		1	0
Total Direct Obligations	Pos/BA	65	8,807	65	7,009	65	7,062	65	10,062	0	3,000
	FTE/Obl.	49	8,685	54	0	54		58		4	

Department of Commerce
Economic Development Administration
Salaries and expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic development assistance programs

Subactivity: Program support

Goals and Objectives

Goals: To provide comprehensive budget, program, management, and ADP support to all EDA components.

Objectives: To assist EDA components in the execution of their programs consistent with the intents of both the Administration and the Congress.

Base Program

The Deputy Assistant Secretary for Program Support serves as Internal Control Coordinator for EDA, is responsible for coordinating and evaluating internal management control systems; provides for the full range of support services, unless otherwise provided at the Departmental level, for EDA headquarters and, as required, for the Regional Offices; evaluates, reports, and makes recommendations on the optimum use of staff and physical assets by EDA; and serves as liaison with the Office of the Assistant Secretary for Administration on all administrative support matters.

The Budget staff develops and prepares the annual budgets for EDA. The Budget Officer is responsible for the total financial program of EDA and for the fiscal aspects of EDA programs entrusted to other Federal agencies; reviews and monitors a fiscal control system for both program and administrative expenses consistent with the requirements of the Anti-Deficiency Act, which shall include, but not be restricted to allotment of funds, operating budgets, employment limitations, and analyses of reports and resource proposals.

The Accounting staff develops and maintains accounting systems and prepares financial reports for internal and external use, according to the needs of management, the requirements of laws or regulations and established policies; provides accounting support for effective control of all funds administered to present accurately the status of the appropriated funds within the requirements of the Anti-Deficiency Act and as required by the Budget Officer; analyzes financial and operating data to ensure that financial and management policies are being followed; and serves as the liaison with the Office of the Secretary and other Federal Agencies in all accounting matters.

The Information Systems staff plans, develops, acquires, and coordinates the use of automatic data processing systems and equipment for EDA; provides data processing services, including the conduct of feasibility studies and the development of systems and programs for the application of automatic data processing techniques; develops and maintains a comprehensive information and data base system to meet specified requirements for budgetary, administrative, planning, operational, program management, and program evaluation purposes; and provides periodic and special summary reports on current optional trends and performance comparisons to planned goals.

The Executive Secretariat staff develops and conducts a program for the efficient management of all official records, including a distribution system for administrative and program orders, develops and administers a report control system for all administrative and operational reports, receives all correspondence addressed to the Office of the Assistant Secretary, and assigns it to the appropriate office for action; records controlled and non-controlled correspondence, maintains prompt follow-up of replies to ensure that deadlines are met, maintains correspondence and policy files, and provides a selective reference service to files as requested by EDA officials.

The Compliance Review staff conducts Section 702 studies; determines and recommends areas eligible for designation as economic development areas, as requested; coordinates all of EDA's environmental activities; develops agency procedures for complying with environmental legislation, regulations, and executive orders; serves as EDA's Official under the provisions of the National Environmental Policy Act of 1969 (NEPA): establishes effective systems throughout EDA to obtain and monitor reports regarding the program of equality of opportunity and ensures compliance with Civil Rights Guidelines, Department and EDA Regulations; establishes report requirements to ensure equality of opportunity by participants in economic development programs, conducts on-site inspections, and receives, investigates, and adjusts complaints; evaluates EDA experience regarding the equal opportunity program from a project activity viewpoint; and establishes uniform equal opportunity standards and procedures to be followed in reviewing EDA projects.

The Operations, Review and Analysis staff provides technical assistance to the Assistant Secretary and staff of EDA in the areas of agencywide program and policy review, development and evaluation.

Proposed FY 1994 Increase

		1994 Base		1994 Estimate		Increase/ (Decrease)	
SUBACTIVITY: PROGRAM SUPPORT		Pers.	Amount	Pers.	Amount	Pers.	Amount
Budget	Pos./BA	8	$2,469	8	$2,645	0	$176
	FTE/Obl.	5		8		3	0
Information Systems	Pos./BA	14	2,128	14	3,878	0	1,750
	FTE/Obl.	11		11		0	0
Operations, Review and Analysis	Pos./BA	7	442	7	1,516	0	1,074
	FTE/Obl.	6		7		1	0

During FY 1994, EDA will upgrade and increase its budget staff and expand management and program analysis capabilities. In the area of budgeting, two functions, formulation and execution will be staffed to correct existing deficiencies. The management and program analysis functions will be expanded to include the responsibility of reviewing program impact both regionally and nationally through the usage of inhouse personnel and contractual services.

Lastly, the Agency will convert its present ADP/MIS operations and upgrade software/hardware capabilities These systems have not been upgraded since the late 1970's

Department of Commerce
Economic Development Administration
Salaries and expenses

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
SUBACTIVITY: REGIONAL OPERATIONS		Pers	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	FTE	Amount
Philadelphia	Pos./BA	46	$2,857	46	$2,751	46	$2,959	46	$2,959	0	$0
	FTE/Obl.	44	2,982	44		44		44		0	0
Chicago	Pos./BA	35	2,166	35	2,140	35	2,306	35	2,306	0	0
	FTE/Obl.	35	2,271	35		35		35		0	0
Seattle	Pos./BA	38	2,470	38	2,370	38	2,549	38	2,549	0	0
	FTE/Obl.	37	2,500	37		37		37		0	0
Austin	Pos./BA	32	1,948	32	1,677	32	1,806	32	1,806	0	0
	FTE/Obl.	28	1,815	27		27		27		0	0
Atlanta	Pos./BA	37	2,380	37	2,266	37	2,434	37	2,434	0	0
	FTE/Obl.	36	2,419	36		36		36		0	0
Denver	Pos./BA	26	1,740	26	1,684	26	1,810	26	1,810	0	0
	FTE/Obl.	26	1,778	27		27		27	0	0	0
Total Direct Obligations	Pos./BA	214	13,561	214	12,888	214	13,864	214	13,864	0	0
	FTE/Obl.	206	13,765	206	0	206		206		0	

Department of Commerce
Economic Development Administration
Salaries and expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic development assistance programs

Subactivity: Regional operations

Goals and Objectives

Goals: Provides at the regional/local levels coordinated outreach and assistance to existing and potential grantees.

Objectives: Develop policies and procedures for the effective operation of all EDA programs and projects; to monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law; and to assist the Inspector General's staff with audit closeouts.

Base Program

Regional operations include the six Regional Directors and their supporting technical, administrative and clerical personnel. The Regional Directors are responsible for the implementation of EDA's program within specific geographical areas and assist in the management of resources and the processing, monitoring and servicing of projects. Regional Counsels provide the legal services review required to execute and administer regional projects. The Public Works, Planning, and Technical Assistance staffs process applications for economic development assistance and monitor and service approved projects at the local level. Economic Development Representatives provide outreach and assistance at the local level.

Department of Commerce
Economic Development Administration
Salaries and expenses

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel Compensation					
11.1	Full-time permanent	$15,958	$16,933	$17,987	$18,187	$200
11.3	Other than full-time permanent	117	84	87	87	0
11.5	Other personnel compensation	312	218	236	236	0
11.9	Total personnel compensation	16,387	17,235	18,310	18,510	200
12.1	Civilian personnel benefits	3,029	3,271	3,557	3,592	35
13.0	Benefits for former personnel	0	0	0	0	0
21.0	Travel and transportation of persons	856	542	945	945	0
22.0	Transportation of things	25	20	25	25	0
23.1	Rental payments to GSA	2,045	2,137	2,225	2,225	0
23.2	Rental payments to others	9	2	2	2	0
23.3	Communicatinns, utilities and miscellaneous charges	349	377	305	305	0
24.0	Printing and reproduction	79	19	78	78	0
25.0	Other services	4,023	2,102	1,568	4,233	2,665
26.0	Supplies and materials	476	57	136	136	0
31.0	Equipment	106	0	0	100	100
43.0	Interest and dividends	1	0	0	0	0
99.0	Subtotal Direct Obligations	27,385	25,762	27,151	30,151	3,000
99.0	Reimbursable Obligations	169	2,652	1,650	1,650	0
99.9	TOTAL OBLIGATIONS	27,554	28,414	28,801	31,801	3,000
	Less prior year recoveries			0	0	0
	Total Budget Authority (Gross)			28,801	31,801	3,000

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

PERSONNEL DATA	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Full-Time Equivalent Employment:					
Full-time permanent	319	338	338	342	4
Other than full-time permanent	13	11	11	11	0
Total	332	349	349	353	4
Authorized Positions:					
Full-time permanent	333	373	373	373	0
Other than full-time permanent	2	2	2	2	0
Total	335	375	375	375	0

NOTE: FY 1992 excludes 18 positions and 16 FTE applicable to account 1320128 "Economic development guaranteed loans."

Department of Commerce
Economic Development Administration
Salaries and expenses

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class		1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel Compensation				
11.1	Full-time permanent:				
	Executive Level	$2	$117	$117	0
	Senior Executive Service (SES)	13	732	732	0
	General Schedule	312	17,138	17,338	$200
	Subtotal	327	17,987	18,187	200
11.3	Other than full-time permanent:				
	General schedule (part-time permanent)	0	87	87	0
11.5	Other personnel compensation:				
	Overtime	0	18	18	0
	SES performance awards	0	12	12	0
	Cash awards	0	131	131	0
	Merit pay awards	0	75	75	0
	Subtotal	0	236	236	0
11.9	Total personnel compensation	327	18,310	18,510	200
12.1	Civilian personnel benefits:				
	Civil Service Retirement System and offset	-14	934	944	10
	Federal Employees' Retirement System	25	567	574	7
	Thrift Savings Plan	4	172	173	1

Object Class		1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12 1	Civilian personnel benefits: (Cont'd)				
	OASDI	$19	$382	$385	$3
	Medicare	0	255	258	3
	Health insurance	63	838	848	10
	Life insurance	0	33	34	1
	Employees' Compensation Fund	36	338	338	0
	Cost of Living Allowance (COLA)	0	38	38	0
	Subtotal	133	3,557	3,592	35
13 0	Benefits for former personnel:				
	Severance pay	0	0	0	0
21.0	Travel and transportation of persons:				
	Common carrier	0	416	416	0
	Per diem/actual expenses	10	312	312	0
	Privately-owned vehicles	0	114	114	0
	Commercially-rent vehicles	0	28	28	0
	Other	0	75	75	0
	Subtotal	10	945	945	0
22.0	Transportation of things	0	25	25	0
23.1	Rental payments to GSA	73	2,225	2,225	0
23.2	Rental payments to others	0	2	2	0
23.3	Communications, utilities and miscellaneous charges:				
	Federal Telecommunications System	18	260	260	0
	Other telecommunications services	0	5	5	0
	Postal services by USPS	0	40	40	0
	Subtotal	18	305	305	0

Object Class		1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
24 0	Printing and reproduction:				
	Envelopes	0	$41	$41	0
	Other (Payments to WCF)	$2	37	37	0
	Subtotal	2	78	78	0
25 0	Other services:				
	Training:				
	Office of Personnel Management	0	67	60	-$7
	Other	0	20	20	0
	Maintenance of equipment	0	100	100	0
	ADP services (NOAA)	0	210	700	490
	Payments to GA, WCF	-17	211	900	689
	Other non-government contracts	-457	900	743	-157
	Other	-59	60	1,710	1,650
	Subtotal	-533	1,568	4,233	2,665
26 0	Supplies and materials:				
	Office supplies	1	67	67	0
	ADP supplies	1	33	33	0
	Other	1	36	36	0
	Subtotal	3	136	136	0
31.0	Equipment	0	0	100	100
99 0	Subtotal Direct Obligations	33	27,151	30,151	3,000
99 0	Reimbursable Obligations	64	2,716	1,650	-1,066
99.9	TOTAL OBLIGATIONS	97	29,867	31,801	1,934
	Less prior year recoveries	0	0	0	0
	Total Budget Authority (Gross)	97	29,867	31,801	1,934

Department of Commerce
Economic Development Administration
APPROPRIATION SUMMARY STATEMENT

Appropriation   Salaries and expenses ($30,151,000)

The Salaries and expenses appropriation finances salaries, benefits and other expenses for personnel engaged in the administration of economic development assistance programs authorized by the Public Works and Economic Development Act of 1965, as amended   This appropriation also finances the costs of services provided to EDA by other Federal and non federal sources, and for other related direct and indirect administrative costs incurred in operating the Agency

The funds requested support an economic development program which includes: (1) planning assistance to local communities; (2) technical assistance in the formulation and coordination of economic development proposals and applications, (3) financing of those grant projects with the greatest program pay-offs which meet the technical, financial and statutory requirements of the legislation; (4) project surveillance and implementation assistance to assure effectiveness in project execution; (5) evaluation of EDA projects to develop more effective ways to provide assistance; and (6) internal and external economic research designed to meet both planning and operating needs related to economic development

The "Salaries and expenses" appropriation is comprised of four major subactivities: 1) Executive Direction; 2) Program Operations; 3) Program Support; and 4) Regional Operations   The Regional Operations subactivity is authorized 214 permanent positions in six regional offices and 47 Economic Development Representatives (EDRs) located in 43 of the 50 states and Puerto Rico. The other three subactivities consists of 161 authorized positions, including two national EDRs, all of which are located in Washington, D C

During FY 1994, EDA will concentrate on staff reinvigoration through functional realignments of existing personnel and positions. The objective of these realignments will be to enhance the Agency's budget, management, and program analysis capabilities to insure maximum, effective utilization of funds. In addition, EDA will convert its ADP/MIS operations from the Unisys system to the IBM system maintained by the Office of the Secretary. Once completed, this conversion is expected to save some $500 thousand annually

Department of Commerce
Economic Development Administration
Salaries and expenses

APPROPRIATION LANGUAGE AND CODE CITATIONS

1 For necessary expenses of administering the economic development assistance programs as provided for by law, $30,151,000.

42 U.S C. 3218, 3219

42 U.S.C. 3218(c) - Authorizes the transfer of appropriated funds between department and agencies of the Government, if such funds are used for the purpose for which they are specifically authorized and appropriated.

42 U S C. 3219 - Authorizes the appropriation of such sums as may be necessary to carry out those provisions of the Public Works and Economic Development Act of 1965, as amended, for which specific authority is not otherwise provided

2. Provided, That these funds may be used to monitor projects approved pursuant to Title I of the Public Works Employment Act of 1976, as amended.

42 U.S.C. 6701 (C)

42 U.S.C. 6701 - Public Works Employment Act of 1976 authorizes the appropriation of such sums as may be necessary for the administration of this Act for the period ending December 31, 1981. This program provides funds for the monitoring and evaluation of projects funded under this local public works program.

3 Title II of the Trade Act of 1974, as amended.

19 U S C 2346(b)

19 U S C 2346(b) authorizes the appropriation of such sums as may be necessary to carry out these functions

4. and the Community Emergency Drought Relief Act of 1977.

42 U S C. 5184

42 U S C. 5184 - Authorizes the appropriation of such sums as may be necessary to carry out those provisions of the Community Emergency Drought Relief Act of 1977

5. Notwithstanding any other provision of this Act or any other law, funds appropriated in this paragraph shall be used to fill and maintain forty-nine permanent positions designated as Economic Development Representatives out of the total number of permanent positions funded in the Salaries and Expenses account of the Economic Development Administration for fiscal year 1993, of which no more than two positions shall be designated as National Economic Development Representatives: Provided further, That such positions shall be maintained within an organizational structure that provides at least one full-time EDR in each State to which a full-time EDR was assigned as of December 31, 1987.

42 U.S.C. 3218, 3219

6. In addition, for administrative expenses of the guaranteed loan program authorized by the Public Works and Economic Development Act of 1965, as amended, $875,000.

42 U.S.C. 3218, 3219

42 U.S.C. 3218(c) - Authorizes the transfer of appropriated funds between department and agencies of the Government, if such funds are used for the purpose for which they are specifically authorized and appropriated.

42 U.S.C. 3219 - Authorizes the appropriation of such sums as may be necessary to carry out those provisions of the Public Works and Economic Development Act of 1965, as amended, for which specific authority is not otherwise provided.

DEPARTMENT OF COMMERCE
Economic Development Administration
Salaries and expenses
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

1 After the amount "$30,151,000" insert the following "of which $1,750,000 for ADP mainframe conversion is to remain available until expended."

2. After the words "Community Emergency Drought Relief Act of 1977." delete the following "Notwithstanding any other provision of this Act or any other law, funds appropriated in this paragraph shall be used to fill and maintain forty-nine permanent positions designated as Economic Development Representatives out of the total number of permanent positions funded in the Salaries and Expenses account of the Economic Development Administration for fiscal year 1993, of which no more than two positions shall be designated as National Economic Development Representatives: Provided further, That such positions shall be maintained within an organizational structure that provides at least one full-time EDR in each State to which a full-time EDR was assigned as of December 31, 1987. In addition, for administrative expenses of the guaranteed loan program authorized by the Public Works and Economic Development Act of 1965, as amended, $875,000."

This proposal simplifies the language, and, at the same time, provides EDA management with greater personnel management and financial flexibility. Language on EDRs was initially inserted to insure that delivery of services was not adversely affected by reductions to the Agency's overall staff as was the case in the early 1980's. The need to retain the language became somewhat superfluous when Congress incorporated office relocations/closings into the General Provisions of the annual appropriations act for the Department of Commerce Deletion of this restrictive language will afford EDA management with the personnel management flexibility essential to addressing changing economic focus.

In FY 1993, Congress terminated EDA's loan guarantee program. In view of this and the fact that none of EDA's residual loans and loan guarantees were made subsequent to September 30, 1991, this referenced language unnecessarily restricts funds utilization For example, in FY 1993 this amount was insufficient and required usage of the remaining appropriation balance.

Economic Development Administration
Economic Development Assistance Programs
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.:		Positions	FTE	Amount
	Amount Available for 1993 as shown in 1994 President's Budget	0	0	$206,150
	Plus: Dec. 17, 1992 proposed transfers not approved (allowed by P.L. 102-395)	0	0	5,893
	Amount Currently Available, 1993	0	0	212,043
EDA-39	Less: Transfers per P.L. 102-395 subsequently implemented	0	0	4,957
	Appropriation, FY 1993	0	0	217,000
EDA-39	Plus: FY 1994 adjustments to base	0	0	-13,130
	1994 Base	0	0	203,870
	Plus: 1994 Investment Program	0	0	33,000
	Plus: (Other 1994 Program Changes)	0	0	-13,720
	1994 Estimate	0	0	223,150

	ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	SUBACTIVITY:		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
EDA-40	Public works	Pos./BA	0	$154,260	0	$142,478	0	$135,385	0	$135,385	0	0
		FTE/Obl.	0	154,294	0	154,384	0	135,385	0	135,385	0	0
	Districts	Pos./BA	0	17,707	0	17,353	0	17,353	0	17,353	0	0
		FTE/Obl.	0	17,664	0	17,353	0	17,353	0	17,353	0	0
	Indiana	Pos./BA	0	2,960	0	2,901	0	2,901	0	2,901	0	0
		FTE/Obl.	0	2,890	0	2,901	0	2,901	0	2,901	0	0
	States	Pos./BA	0	1,973	0	1,933	0	1,933	0	1,933	0	0
		FTE/Obl.	0	2,164	0	1,933	0	1,933	0	1,933	0	0
	Urban	Pos./BA	0	2,636	0	2,583	0	2,583	0	2,583	0	0
		FTE/Obl.	0	2,227	0	2,583	0	2,583	0	2,583	0	0
EDA-42	**Subtotal, Planning**	Pos./BA	0	25,276	0	24,770	0	24,770	0	24,770	0	0
		FTE/Obl.	0	24,945	0	24,770	0	24,770	0	24,770	0	0

SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	SUBACTIVITY:		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
	Local/National technical assistance	Pos./BA	0	$2,176	0	$1,430	0	$2,850	0	$2,850	0	0
		FTE/Obl.	0	2,685	0	1,430	0	2,850	0	2,850	0	0
	University centers	Pos./BA	0	7,724	0	7,570	0	7,570	0	7,570	0	0
		FTE/Obl.	0	7,724	0	7,570	0	7,570	0	7,570	0	0
EDA-45	**Subtotal, Technical assistance**	Pos./BA	0	9,900	0	9,000	0	10,420	0	10,420	0	0
		FTE/Obl.	0	10,409	0	9,000	0	10,420	0	10,420	0	0
EDA-47	**Research, evaluation, and demonstration**	Pos./BA	0	500	0	0	0	500	0	500	0	0
		FTE/Obl.	0	500	0	0	0	500	0	500	0	0
EDA-48	**Trade adjustment assistance**	Pos./BA	0	14,000	0	13,720	0	13,720	0	0	0	$(13,720)
		FTE/Obl.	0	14,000	0	13,720	0	13,720	0	0	0	(13,720)
EDA-49	**Economic adjustment**	Pos./BA	0	98,000	0	22,075	0	19,075	0	19,075	0	0
		FTE/Obl.	0	22,439	0	94,575	0	20,575	0	20,575	0	0
EDA-50	**Defense Economic Investment**	Pos./BA	0	0	0	0	0	0	0	33,000	0	33,000
		FTE/Obl.	0	0	0	0	0	0	0	33,000	0	33,000
	Total	Pos./BA	0	301,936	0	212,043	0	203,870	0	223,150	0	19,280
		FTE/Obl.	0	226,587	0	296,449	0	205,370	0	224,650	0	19,280

SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	ACTIVITY: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease)	
	SUBACTIVITY:		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
	Adjustments for:											
	Recoveries			-$953							0	0
	Unoblig. bal., start of year			-11,832		-$87,885		-$3,479		-$3,479	0	0
	Unoblig. bal. transferred										0	0
	Unoblig., bal. end of year			87,885		3,479		1,979		1,979	0	0
	Unoblig. bal. expiring			249							0	0
	Transfer from other accounts										0	0
	Transfer to other accounts					4,957		0			0	0
	Appropriation		0	301,936	0	217,000	0	203,870	0	223,150	0	19,280

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$230,662	$425,046	$205,870	$225,150	$19,280
Financing:					
Offsetting collections from:					
Federal funds	-52,172	-80,500	-500	-500	0
Trust funds					
Non-Federal sources					
Recoveries	-953				
Unobligated balance, start-of-year	-11,832	-135,982	-3,479	-3,479	0
Unobligated balance transferred					
Unobligated balance, end-of-year	135,982	3,479	1,979	1,979	0
Unobligated balance lapsing	249				
Budget Authority	301,936	212,043	203,870	223,150	19,280
Transferred to/from other accounts		4,957			
Sequester					
Appropriation	301,936	217,000	203,870	223,150	19,280

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
SUMMARY OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	FTE	Amount
Continuation of 1993 operating level	0	-$13,130

The reduction of $13,130,000 is consistent with the 1993 operating level as approved by Congress and reflects a transfer of $10,850,000 and $2,280,000 which will be used for planned reallocation of staff resources.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Public Works and Development Facilities

Goals and Objectives

Goals: To promote economic development through grants to public entities for public works projects, and other activities which will facilitate the creation or retention of private sector employment opportunities and increase income levels, and in addition, promote short-term job creation activities through the Public Works Impact Program.

Objectives: To move toward the stated goal by providing grants for the construction or expansion of public works projects which will assist in creating and or/saving jobs and will assist in leveraging in private investments. Assistance is provided to develop a structure conducive to the locations of commercial and industrial enterprises thereby stabilizing and diversifying local economies, to initiate development in certain communities or parts thereof and to provide essential services to communities with highly depressed economies.

Base Program

The public works program provides grants for the construction or expansion of projects which (1) offer substantial employment potential, (2) improve the capacity for economic growth through the development of a structure conducive to the location of industrial and commercial enterprises, or (3) provide essential public services necessary as an economic base in distressed areas. The program helps finance the construction of such projects as water and sewer systems which permit economic expansion industrial parks, access roads, the expansion of harbor and airport facilities, and other essential community facilities designed to improve the economic opportunities in distressed areas by encouraging related private sector investment.

o Direct grants -- Direct grants for redevelopment areas (including areas within Districts) are authorized under the Public Works and Economic Development Act for up to 80 percent (100 percent for Indian tribes) of a project's cost. Direct grants for economic development centers are also authorized. Direct grants may be used to acquire, construct, rehabilitate, alter, expand, or improve public facilities, and may include the acquisition of machinery and equipment.

o Bonus grants -- Bonus grants permit Federal participation in the amount of an additional 10 percent, but not more than a total of 80 percent, of the total project cost of selected projects located in Redevelopment Areas within multi-county development districts. Bonus grants provide an additional stimulus for Redevelopment Areas to participate in EDA's District economic development programs.

- Public Works Impact Program (PWIP) -- This program provides immediate useful work for the unemployed of the project areas, basically through construction jobs. The Public Works and Economic Development Act has required that not less than 15 nor more than 35 percent of the funds appropriated under Title I shall be used for PWIP projects. The grant rate ranges from 80 percent to 100 percent on PWIP projects.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Planning

Goals and Objectives

Goals: To develop a capacity for economic development planning at the state, multi-county, and local levels, and for Indian tribes, that is comprehensive in scope, is coordinated with other private sector programs and other levels of government, and looks toward the effective use of public and private resources in creating jobs for the unemployed and underemployed, especially in economically distressed areas. To assist areas faced with major abrupt changes in their economic conditions, through its planning adjustment assistance program. This aid enables communities to develop plans and strategies that identify adjustment assistance needs, and to provide a comprehensive framework for Federal adjustment assistance requests.

Objectives: To assist districts, areas, States and territories, Indian reservations and Urban communities to establish, maintain and develop the capacity to identify economic problems in the context of national and subnational trends, assess the availability of local and non-local resources, and formulate and implement realistic development strategies at all levels of government. To assist in planning for adjustment to DOD realignments, environmental regulations, disasters, and disruptions caused by other factors including import competition, individual corporate decisions, and product or process obsolescences.

Base Program

Planning programs are a key element in achieving EDA's long-term goals. Planning involves the assessment of the local economic situation, the development of policies and goals and the preparation of local investment strategies that guide resource allocation and project development. From such planning efforts flow technical assistance, public works, private sector business loans/guarantees, and other investment proposals for job creation and retention. Planning grantees develop the capability to use more effectively these investment tools, available both from EDA and other Federal Agencies, and to coordinate their delivery at the State, area-wide and local levels.

EDA's Section 301 (b) administrative support planning grants assist local planning organizations by funding professional staffs which carry out the following major activities: (1) preparation of Overall Economic Development Programs (OEDPs); (2) implementation of the development programs after adoption by the community, Indian or District organization; (3) coordination of Federal, state, and private development; and (4) assistance to local governments and individuals involved in local development organizations are composed of local leaders representing the economic, political, civic, and social interests of the area served. In addition to actual implementation of their development plans, they serve as coordinating mechanisms for public and private resource agencies operating in their areas.

The Section 302 program provides direct grants to States, cities, and other political subdivisions of a State, which fund up to 80 percent of the cost of comprehensive economic development planning. State planning grants increase State participation in setting and implementing economic development goals and promote the integration of the Federal-State-local efforts for planning and developing projects.

Districts:

Economic Development Districts are multi-county development organizations composed of local government, private sector and minority representatives. Districts have been established to design area-wide, long-term economic development programs which address common economic problems, to assist local units of government in implementing their economic development programs, and to obtain the involvement of principal economic interests and economically distressed citizens in public economic development decision-making.

EDA's District program is among the most sophisticated and effective Federal-local delivery systems in the nation. The Economic Development Districts, operating nation-wide, form a crucial link in the Federal-local relationship, matching the needs of local areas to available State and Federal programs and private resources. Although the District program was originated by the Agency, EDA funding is used primarily to leverage other Federal and State monies, resulting in the generation of effective and broad-based institutional capabilities for local economic development.

Indian:

EDA's Indian planning program has as its major objective the promotion of economic self-determination and growth by developing the institutional capacity required by Indian reservations to formulate and carry out realistic development objectives and plans. The EDA Indian program serves numerous reservations, many of which lack the basic public facilities and services essential to raising their standard of living, by supporting professional planners who direct their efforts to the development of solutions to those problems. Planning can be expected to lead to the basic infrastructure necessary for subsequent economic development. Further efforts are intended to expand and diversify existing economic activity by preserving or creating jobs and removing impediments to continued economic development on the reservations.

States:

EDA administers a program of state planning grants in order to help the States in attaining the capacity to plan and coordinate economic development activities at the State and sub-state level. Many economic problems cross local political boundaries and can encompass state-wide areas. Moreover, local governments do not always have the legal authority or the financial resources necessary to undertake effective economic development or adjustment programs. To meet these problems, EDA's State program has the following as its major objectives: to provide States with the institutional capacity to respond to State and substate economic changes associated with diverse development trends affecting the location and relocation of industry; to establish coordinating mechanisms with and between States and thereby insure multi-jurisdictional cooperation at the substate, State, and regional levels; and to identify development objectives, provide strategies and plan implementation methods to leverage public and private sector capital that will result in long term employment opportunities.

Urban:

The urban planning program focuses on those cities and urban counties which comprise the core of metropolitan areas and are characterized by high population densities and complex economies. EDA also provides assistance to non-governmental organizations within urban areas and supports metropolitan economic development planning needed to manage economic problems on a wider scale. The goal of this program is to generate economic improvements in cities and other urban entities by providing them with the capacity to overcome their economic development problems.

EDA's objectives with cities and urban counties are to diversify and strengthen the economic base; contribute to the creation of employment opportunities for central city unemployed; and augment the planning and implementation capacities of city and county governments to integrate local and Federal resources so that they can (1) generate commercial and industrial enterprises; (2) provide necessary assistance to leverage private sector investment capital and facilitate business development; and (3) adjust to changing regional and national market forces. In recognition of the complexity of the economic and social fabric of cities, EDA also assists non-governmental institutions having the capacity to integrate neighborhood developmental activities within the scope of city-wide planning.

Department of Commerce

Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Technical Assistance

Goals and Objectives

Goals: To provide technical assistance to increase the quality of decisions regarding proposed economic development projects and to increase the effectiveness of funded projects thereby reducing unemployment and raising incomes in distressed areas.

Objectives: To provide feasibility and industry studies, natural resource development and export promotion. To fund studies of topical issues (technology transfer, business financing). To enable University Centers to provide development and business assistance in distressed areas.

Base Program

The key to finding new sources of jobs and income in a lagging area often lies in furnishing missing know-how, technical information, expert opinion, and counseling. To meet this need, EDA offers a broad range of technical assistance to communities and organizations so they will be able to evaluate the resources at hand and make the best use of them, thereby laying the foundation for economic development. Technical assistance provides information, data, and know-how for evaluating and/or shaping specific projects and programs in economic development, and can be used to evaluate the feasibility of potential development grants and development finance investments. A key feature of EDA's technical assistance program is that it may be applied in any area of the Nation and does not require that an area be qualified or designated. This flexibility enables a variety of local governments to receive needed advice upon which to base their economic development efforts.

The local technical assistance program is designed to stimulate local responses to economic development problems by providing information and other assistance necessary to expand infrastructure, strengthen local leadership, bring about desired local economic changes and assist the business community in the decision making process related to capital investment and new business ventures. Technical assistance activities are directed primarily toward gaining the knowledge needed to carry out specific projects which are a part of comprehensive development strategies. This program provides assistance in developing specific industry and site analyses for public/private investments; market analyses; strategies for obtaining financial resources necessary to support specific development projects, and similar knowledge - seeking projects. The assistance is rendered through feasibility studies, management and operational assistance, on-site technical expertise and training, marketing assistance, and technology transfer. The Agency also supports non-profit local development organizations and management and training groups whose programs focus on improving the economic conditions of Native Americans.

National associations such as the Council of State Governments, the National Association of Development Organizations, the National League of Cities, and the Council for Urban Economic Development, are used to provide links between themselves and their counterparts in state and local governments. These organizations act as information exchange media among their membership and are responsible for developing national economic development priorities. These associations continue to be important factors in the area of economic adjustment. By supporting national organizations, the technical assistance program utilizes their capabilities and thereby enhances the effectiveness of agency funds.

The University Centers provide assistance primarily to the private sector to promote business expansion, business stabilization, and new venture development. Assistance is provided to small and medium-sized businesses to assist them in resolving particular problems such as those related to management, financing and marketing. By doing so, the Centers aid businesses in their attempts to establish, stabilize, or expand production or commercial operations. In addition, the Centers provide job saving technical support at the local level by providing professional expertise or special studies which are beyond the capacity of the local staff.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Research, evaluation, and demonstration

Goals and Objectives

Goals: To elicit the maximum employment and economic development impact from its programs, through new knowledge, analysis, demonstration projects and data presentation that ensure a realistic assessment of economic development problems and potential solutions. To aid EDA, other development organizations, States and communities in understanding economic development problems and issues, designing economic development programs, and making policy decisions.

Objectives: To conduct appropriate research in high priority areas. This research will serve as a baseline in support of agency policy formulation and decisions and for the identification of new research hypotheses. To undertake state-of-the-art research which brings together existing research in a format which is usable at the regional, State and local levels. To implement, assess and revise the research dissemination strategy to assure the broad dissemination of useful research information through publications, policy seminars, and other dissemination techniques.

Base Program

The assurance of a successful EDA program lies in a reliable and thorough research program capable of furnishing accurate and timely information upon which program and policy decisions can be based. The EDA research program is carried out through external research undertaken through contract, grant or transfer arrangements, and in-house studies and analyses. Specific research areas will continue to reflect emerging and anticipated economic development problems and will seek to identify programs and policies suitable for providing the long-term economic vitality and stability.

The review and dissemination of available research results, appropriate analytical tools and data are an important part of the EDA research program. Through its program of basic and applied economic research, EDA will continue to provide a broad range of information to guide its own programs and those of State and local economic development agencies. EDA's program evaluation activities have provided much valuable information to agency decision makers about the effectiveness of EDA programs and the cost of obtaining desired economic development results. Such studies are made available to the Department of Commerce, the OMB, and the Congress so that they may use the information to arrive at rational decisions regarding EDA's economic development programs.

During FY 1994, EDA will consider the following areas for evaluation: 1) The usefulness and effectiveness of EDA's regional strategies; and 2) Defense economic conversion.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Trade Adjustment Assistance

Goals and Objectives

Goals: To provide technical assistance to trade-injured firms and industries to help them regain the ability to compete in the global economy. To certify firms/industries eligible for such assistance.

Objectives: To provide funding to Trade Adjustment Assistance Centers and representative industry organizations to provide hands-on assistance and to undertake activities to help trade-impacted firms/industries.

Base Program

Trade Adjustment Assistance: EDA's Trade Adjustment Technical Assistance program offers adjustment assistance to trade-impacted firms and industries. Trade-impacted firms are assisted in preparation of certification petitions, general diagnosis of their problems and opportunities, and-solution of specific problems in implementing their plans for economic recovery. Firms can be assisted either directly by EDA through grants to qualified industry experts (consultants) or through the Trade Adjustment Assistance Center (TAAC) program.

Proposed FY 1994 Decrease

During FY 1994, EDA will discontinue funding to the TAACs and industry organizations. Technical assistance to trade-impacted firms and industries will be provided through EDA's traditional program entities and other Commerce bureaus, such as the Minority Business Development Agency and the National Institute of Standards and Technology, and the SBA.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic adjustment

Goals and Objectives

Goals: To provide special economic development and adjustment assistance to help State and local areas meet special needs arising from actual or threatened severe unemployment as a result of economic dislocation, including unemployment from actions of the Federal Government and from compliance with environmental requirements which remove economic activities from a locality, and economic adjustment problems resulting from long term economic deterioration and to encourage-cooperative intergovernmental action to prevent or solve economic adjustment problems.

Objectives: To assist communities in adjustment to dislocations resulting from the enforcement of environmental regulations, import competition, natural disasters, judicial or legislative decisions, and individual corporate decisions. Available resources will generally be used to meet all such demand before dislocations of other types are addressed. Projects in these categories will be chosen on the basis of severity of distress and quality of the project, rather than by a formal allocation.

Base Program

The economic adjustment assistance program is authorized by Title IX of PWEDA. The purpose of the program is to help local areas develop and/or implement comprehensive adjustment strategies designed either to anticipate and prevent economic dislocation or to reestablish employment opportunities and economic stability as soon as possible after dislocation occurs; or to adjust to problems resulting from severe long-term economic deterioration.

Redevelopment areas and Economic Development Districts established under the authority of Title IV of PWEDA, Indian tribes, States, cities or other political subdivisions of a state or a combination of such political subdivisions are eligible to receive assistance under this program. The Title IX program is used to address a broad range of economic adjustment problems. Grants may be made directly to eligible recipients who have a special need relating to an actual or expected rise in unemployment or other economic adjustment problems. Grants approved under this title may be used in direct expenditures by the applicant or through redistribution to public and private groups through loans, loan guarantees, or other assistance. Title IX plays an important role in the Federal response to disasters, in concert with FEMA and other agencies, to the specific end of helping an area restore its local economy. Title IX assistance is the only Federal tool available to fill certain gaps in disaster recovery efforts, especially those related to the restoration of previous levels of local economic activity. As distinguished from FEMA which responds to immediate needs of life, health, shelter and security, EDA's recovery assistance program is structured to assist the community in long-term recovery where the economic base of the area has been severely impacted by a natural disaster.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Defense Economic Investment

Goals and Objectives

Goals: To provide for defense economic conversion and adjustment assistance to help communities adversely impacted by the Department of Defense post-Cold War downsizing.

Objectives: To assist communities in readjusting to Defense downsizing by making available a full-range of economic development tools as provided for in the Public Works and Economic Development Act of 1965, as amended.

Base Program

This newly established activity will focus specifically on providing assistance to those communities adversely affected by Department of Defense downsizing. When EDA assistance is provided under the title IX program, virtually all of the Agency's program tools may be packaged into a single grant including components for planning and strategy development (not duplicating DoD), technical assistance, construction and public works, revolving loan fund assistance, and training (not duplicating Departments of Labor or Education programs). Although assistance is usually funded under the Title IX program, Public Works funds may also be used for defense economic investment if all applicable criteria are met.

FY 1994 Investment Program

For FY 1994, EDA is requesting $33.0 million. Unlike DoD's long-term emphasis which is targeted toward converting military bases to non-military uses after closure, EDA will focus primarily on providing immediate assistance geared toward "jump starting" the local economy. Funds would help firms to diversify, pursue non-defense ventures, and train displaced defense workers. EDA will also consider applications for funding selected implementation steps of the DoD-sponsored base reuse plan. These funds are contingent upon passage of the President's deficit reduction package.

Department of Commerce
Economic Development Administration
Economic Development Assistance Programs
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Estimate	1993 Currently Budget	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel Compensation					
11.1	Full-time permanent					0
11.3	Other than full-time permanent					0
11.5	Other personnel compensation					0
11.9	Total personnel compensation	0	0	0	0	0
12.1	Civilian personnel benefits					0
13.0	Benefits for former personnel					0
21.0	Travel and transportation of persons					0
22.0	Transportation of things					0
23.1	Rental payments to GSA					0
23.2	Rental payments to others					0
23.3	Communications, utilities and miscellaneous charges					0
24.0	Printing and reproduction					0
25.0	Other services	641	1,000	1,000	1,000	0
26.0	Supplies and materials					0
31.0	Equipment					0
41.0	Grants and fixed charges	225,946	295,449	190,650	223,650	33,000
99.0	Subtotal Direct Obligations	226,587	296,449	191,650	224,650	33,000
99.0	Reimbursable Obligations	4,075	128,597	500	500	
99.9	TOTAL OBLIGATIONS	230,662	425,046	192,150	225,150	33,000
	Less prior year recoveries			-1,500	-1,500	0
	Total Budget Authority			190,650	223,650	33,000

Department of Commerce
Economic Development Administration
APPROPRIATION SUMMARY STATEMENT

Appropriation: Economic development assistance programs

EDA provides a broad range of economic development assistance to a variety of geographical areas which it designates. These criteria for eligibility relate to such general types of distress as substantial and persistent unemployment levels, low incomes, and slow job growth. A number of additional, more specialized criteria may also qualify an area for assistance. Unlike EDA's public and private sector investment programs, Technical Assistance and Research projects are not limited to designated areas. Eligibility for Economic Adjustment funds is based on a determination by the Secretary that a special need for adjustment assistance exists; this can result from sudden and severe economic dislocation or from a long term loss of economic activity.

The basic purpose of the programs of the Economic Development Administration is to stimulate employment and increase incomes in subnational areas which are characterized by underutilized resources which, if put to productive use, can contribute to greater national productivity and balanced national economic growth. The structural economic problems of various geographic areas, though having distinct characteristics, are interrelated, and thus an effective Federal economic development program must transcend the conventional conceptions of urban and rural development by addressing all geographic areas within a framework of national priorities and resources.

The authorizing legislation provides for a broad range of specific program tools which the Agency can utilize individually or in combination to meet the specific needs of individual distressed communities. EDA provides public works grants and development finance grants in particular areas to leverage investments that will create new, permanent jobs in distressed areas. EDA also provides grants for economic development planning purposes and technical assistance, and supports a range of evaluation and research activities aimed at increasing public understanding of the processes of economic growth and development. Within the areas it serves, EDA strives to meet its program objectives through the use of a broad range of activities.

1. Planning grants encourage and support local development organizations by providing funding for professional planning staff and related services. The planning grants programs include Section 301 administrative support for Districts and individual distressed areas, including Indian Reservations, and Section 302 grants which support the economic development programs of States and cities.

2. Technical assistance grants provide appropriate, specific management and operational technical expertise to help assure the success of grant projects; support institutional projects that directly benefit a number of local and regional economic development groups and organizations, support feasibility studies and other site-related projects; and provide for expert assistance to potential grantees.

3. Development grants provide funds for the construction or expansion of community facilities conducive to the location of industrial and commercial enterprises and the creation of additional long-term employment opportunities. Typical projects include water and sewer systems which support economic growth, industrial parks, access roads and expansion of harbor and airport facilities.

   In addition to the public works program objective of stimulating long-term economic development, EDA also conducts a Public Works Impact Program. The primary objective of public works grants funded under this program is to stimulate immediate construction employment for unemployed and underemployed persons in particularly economically distressed areas.

4. Economic adjustment grants help areas resolve problems related to actual or threatened sudden and severe disruption of a local economy. Assistance is provided to facilitate community adjustments to such situations as the closing of a defense installation in the area. Under this program activity, States, cities, counties, Indian tribes and other combinations of areas can receive grant assistance to assess the dislocation and to develop and implement economic adjustment plans. The assistance can be used for public facilities, public services, business development, planning, technical assistance and a variety of other types of aid.

5. Research, evaluation, and demonstration assists in the development of improved EDA programs and also provides research and information useful to others in the economic development field. Program evaluation assists agency management, Congress and others in making policy and management judgments. Through the use of EDA staff or outside contractors, EDA periodically evaluates the impacts of its various programs as a means of identifying policy and program modifications that will increase the Agency's effectiveness.

6. Defense Economic Investment, specifically assists communities severely impacted by planned Department of Defense base closures and procurement reductions. EDA-funded projects could include funding from all EDA programs.

In FY 1994, EDA will continue to concentrate its resources in areas characterized by high unemployment, low growth rate, loss of jobs, outmigration, defense conversion, and physical deterioration. EDA will concentrate on projects which can be expected to lead to substantial private investment and permanent employment opportunities, especially for residents of the target areas.

Areas of concentration will include rural places that have not shared in the country's growth, as well as cities which are experiencing long-term economic deterioration. In some cases, we will focus on pockets of distress--for example, minority neighborhoods that are stagnating within cities that are economically stable--but only if there is a local development institution with the capacity to carry out the redevelopment plan consistent with the economic development efforts of the city.

In the development of funding packages and in monitoring performance, EDA will consider local planning and the use of local and State government funds, private investment and other Federal funds as well as the use of EDA funds. The EDA goal is economic development or adjustment--measured by new private investment, new and saved jobs, reduction in unemployment (particularly among minorities and youth) and increased income levels, all geared towards increased productivity and global competitiveness.

Department of Commerce
Economic Development Administration
Economic development assistance programs
APPROPRIATION LANGUAGE AND CODE CITATIONS

1. For grants under the Trade Adjustment Assistance Program, as authorized by 19 U.S.C. 2024, and for economic development assistance as provided by the Public Works and Economic Development Act of 1965, as amended, the Public Law 91-304, and such laws that were in effect immediately before September 30, 1982, $223,150,000: Provided, That none of the funds appropriated or otherwise made available under this heading may be used directly or indirectly for attorneys' or consultants' fees in connection with securing grants and contracts made by the Economic Development Administration.

42 U.S.C. 3131

42 U.S.C. 3131 - The Secretary is authorized to make direct and supplementary grants for such public facilities as water and sewer systems, access roads to industrial parks or areas, port facilities, railroad sidings and spurs, public tourism facilities, vocational schools, flood control projects, and site improvements for industrial parks.

42 U.S.C. 3135

42 U.S.C. 3135 - Authorizes appropriations for public works and development facilities grants through fiscal year ending September 30, 1982.

42 U.S.C. 3141

42 U.S.C. 3141 - The Secretary is authorized to make loans to assist in financing the purchase or development of land improvements for public works, public service, or development facility usage, and the acquisition, construction, rehabilitation, alteration, expansion or improvement of such facilities, including related machinery and equipment, within a redevelopment area.

42 U.S.C. 3142

42 U.S.C. 3142 - The Secretary is authorized (1) to make loans for any project within a redevelopment area for the purchase or development of land and facilities for industrial or commercial usage including the construction of new buildings, the rehabilitation of abandoned or unoccupied buildings, and the alteration, conversion or enlargement of existing buildings; (2) to guarantee loans for working capital made to private borrowers by private lending institutions, and (3) new tools of direct working capital loans, broader authority for working capital guarantees, guarantees of fixed asset loans made by private institutions, and guarantees of lease payments for buildings and equipment. Authorizes appropriations for public works loans, business loans and loan guarantees through the fiscal year ending September 30, 1982.

42 U.S.C. 3144

42 U.S.C. 3144 - The Secretary is authorized to make an interest free revolving loan to a redevelopment area which has a plan for the redevelopment of the area approved by the Secretary. Such plan may include industrial land assembly, land banking, acquisition of surplus government property, acquisition of industrial sites including acquisition of abandoned properties with redevelopment potential, real estate development, including

redevelopment and rehabilitation of historical buildings for industrial and commercial use, rehabilitation and renovation of usable empty factory buildings for industrial and commercial use, and other investments which will accelerate recycling of land and facilities for job-creating economic activity.

42 U.S.C. 3151

42 U.S.C. 3151 - Authorizes program of technical assistance grants and contracts, planning grants under Section 301 of the Act, as well as research grants and contracts. Also, it authorizes, under section 302 of the Act, a program of economic development planning grants to States and the other political subdivisions, including cities, redevelopment areas and economic development districts.

42 U.S.C. 3152

42 U.S.C. 3152 - Authorizes appropriations for technical assistance, research and information (planning grants) through September 30, 1982.

42 U.S.C. 3153

42 U.S.C. 3153 - Authorizes the appropriations to be used to make grants to States for the purpose of supplementing or making grants or loans authorized under titles I, II, III, IV, and IX of the Act, through the fiscal year ending September 30, 1982.

42 U.S.C. 3171

42 U.S.C. 3171 - The Secretary is authorized to designate economic development districts containing two or more redevelopment areas and one or more centers. This section makes centers in districts eligible for all assistance which is authorized by titles I and II of the Act. This section also provides bonus grants up to 10 percent of the project cost for projects in redevelopment areas.

42 U.S.C. 3241

42 U.S.C. 3241 - Provides special economic development adjustment assistance programs to help State and local areas meet special needs arising from actual or threatened severe unemployment arising from economic dislocation, including unemployment arising from actions of the Federal Government and from compliance with environmental requirements which remove economic activities from a locality..."

Authorizes appropriations for interest free revolving loans through the fiscal year ending September 30, 1982.

42 U.S.C. 3243

42 U.S.C. 3243 - Authorizes the use of grants under Title IX to any eligible recipient to be used for any of the following: public facilities, public services, business development, planning, unemployment compensation, rent supplement, mortgage payment assistance, research, technical assistance, training, relocation of individuals and businesses and other appropriate economic adjustment assistance.

42 U.S.C. 3245

42 U.S.C. 3245 - Authorizes appropriations for economic adjustment assistance through September 30, 1982.

2. Title II of the Trade Act of 1974.

19 U.S.C. 2343

19 U.S.C. 2343 - The Secretary shall furnish technical assistance through existing agencies and through private individuals, firms and institutions. The technical assistance furnished shall consist of (1) assistance to the firm in developing a proposal for its economic adjustment (2) assistance in the implementation of such proposal or (3) both.

19 U.S.C. 2344

19 U.S.C. 2344 - The Secretary may provide to a firm such financial assistance in the form of direct loans or guarantee of loans which will materially contribute to the economic adjustment of the firm.

19 U.S.C. 2346

19 U.S.C. 2346 - Authorizes the appropriations of such sums as may be necessary to carry out the functions of furnishing adjustment assistance to firms, which sums are authorized to be appropriated to remain available until expended.

19. U.S.C. 2373

19 U.S.C. 2373 - Adjustment assistance consists of (1) all forms of assistance (i.e. grants or loans), other than loan guarantees, which are provided to a redevelopment area under the Public Works and Economic Development Act of 1965, and; (2) loan guarantees are not to be made to any person under such Act, but authorized for: (1) the acquisition, construction, installation, modernization, development, conversion, or expansion of land, plant, buildings, equipment, facilities, or machinery, and (b) working capital.

19 U.S.C. 2374

19 U.S.C. 2374 - Authorizes the appropriation of such sums as may be necessary for the succeeding seven fiscal years after June 30, 1975.

DEPARTMENT OF COMMERCE
Economic Development Administration
Economic development assistance programs
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

1. After the words "For grants" delete the following "under the Trade Adjustment Assistance Program, as authorized by 19 U.S.C. 2024, and"

   In FY 1994, EDA is proposing the termination of the Trade Adjustment Assistance (TAA) program. Continued assistance to firms and industries adversely impacted by imports will be provided by other Commerce bureaus and the Small Business Administration.

2. After the words "as amended," delete the following "the Public Law 91-304, and such laws that were in effect immediately before September 30, 1982, $217,000,000"

   Dedesignation, originally required by section 403 of the Public Works and Economic Development Act of 1965, was prohibited by P.L. 91-304 (1970) and has continued in all subsequent appropriations bills. If dedesignation is permitted, approximately 1,200 economically healthy areas will no longer be eligible for EDA assistance. In no way would dedesignation affect the delivery of services to economically distressed areas.

3. After the words "Economic Development Administration." insert the following "In addition to amounts otherwise available under this head, and subject to the same terms and conditions, $33,000,000 for grants for economic development assistance as provided by Title IX of the Public Works and Economic Development Act of 1965, as amended."

   This change adds the President's investment proposal of $33,000,000 for Defense Economic Investment.

DEPARTMENT OF COMMERCE
Economic Development Administration
SCHEDULE OF PERMANENT POSITIONS

	1992 Actual	1993 Estimate	1994 Estimate
Executive Level I	0	0	0
Executive Level II	0	0	0
Executive Level III	0	0	0
Executive Level IV	1	1	1
Subtotal	1	1	1
ES 6	0	0	0
ES 5	1	1	1
ES 4	4	4	4
ES 3	0	0	0
ES 2	1	1	1
ES 1	1	1	1
Subtotal	7	7	7
GS 16	0	0	0
GM 15	15	15	16
GS 15	0	0	0
GM 14	38	38	37
GS 14	12	12	14
GM 13	20	20	21
GS 13	95	95	94
GS 12	66	66	65
GS 11	26	26	25
GS 10	3	3	4
GS 9	13	13	12
GS 8	8	8	8
GS 7	24	24	24
GS 6	12	12	12
GS 5	27	27	27
GS 4	8	8	8
GS 3	0	0	0
GS 2	0	0	0
GS 1	0	0	0
Subtotal	367	367	367
Total authorized	375	375	375
Unfilled	-37	-20	-20
Total permanent employment, end of year	338	355	355
Average ES Salary	$94,469	$104,289	$105,100
Average GS Grade	11.22	11.22	11.23
Average GS/GM Salary	$44,294	$49,055	$49,965

Mr. **SMITH** of Iowa. Testifying today on behalf of the Economic Development Administration is the Acting Assistant Secretary of Commerce for Economic Development, Craig M. Smith. We will insert your biographical sketch into the record at this point, and you may now proceed with your statement.

[The biographical sketch of Mr. Smith follows:]

BIOGRAPHICAL SKETCH OF CRAIG M. SMITH, ACTING ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT

Craig M. Smith, a charter (1979) career member of the Senior Executive Service, has been Acting Assistant Secretary for Economic Development since January 1993.

Mr. Smith began his career in the Federal Government with the Economic Development Administration in October 1973 as Regional Director of the Denver Regional Office. In May of 1982, he was appointed the Regional Director of the Philadelphia Regional Office.

In April 1985, Mr. Smith came to EDA Headquarters as Director of the Office of Public Works. In June 1986, Mr. Smith became Deputy Assistant Secretary for Management Support. In July 1990, he assumed the position of Deputy Director for Program Operations. He has a wide range of experience covering all facets of the Economic Development Administration both in field and headquarters operations.

From 1956 to 1959 he was employed as a Financial Analyst with the Carborundum Company in Niagara Falls, New York. His affiliation with economic development began in 1959 with the Arkansas Industrial Development Commission in Little Rock, Arkansas. He served the agency until June 1963 ending his tenure as Senior Administrator. Mr. Smith was active in private business in Little Rock until 1975, when he joined EDA.

Mr. Smith is author of the publication, "An Industrial History of Arkansas."

He is a graduate of Ridley College, St. Catharines, Ontario, Canada, and received a Bachelor of Science Degree from the University of Virginia. He attended the University's Graduate School of Business for one year. Military service was with the U.S. Army from 1952 to 1954. He is married to the former Carolyn Sue Fullerton of Ft. Smith, Arkansas, and has two children.

INTRODUCTION

Mr. **SMITH** of Iowa. We are really pressed for time; we don't need to go over the history, but maybe you could concentrate orally and briefly on what you propose to do differently than what has been done in previous years.

Mr. **CRAIG M. SMITH.** Mr. Chairman, my remarks have been submitted for the record; but I do have a brief statement.

Mr. **SMITH** of Iowa. All right.

OPENING STATEMENT

Mr. **CRAIG M. SMITH.** My name is Craig Smith, and I am the Acting Assistant Secretary for Economic Development.

Mr. Chairman and Members of the subcommittee, thank you for providing me the opportunity to appear today to discuss the 1994 budget request for the Economic Development Administration, the first such request in 12 years.

As a career Federal employee and speaking for the rest of the EDA, let me say that we are very excited at the prospect of being an integral part of President Clinton's and Secretary Brown's economic agenda.

FY 1994 APPROPRIATION REQUESTS

For fiscal year 1994, we are requesting $30,151,000 for salaries and related expenses. This level of funding will fully support 355 full-time employees, including 49 economic development representatives.

In addition to salaries and related expenses, we are also requesting $223,150,000 to provide grants for public works and development facilities and other capacity-building types of assistance, such as planning, technical assistance, and for coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically-distressed areas and regions of this country.

To facilitate the delivery of this assistance, EDA is proposing simplified appropriations language; and, most importantly, we will be submitting, for the first time in 12 years, reauthorizing legislation for EDA.

Lastly, we are requesting termination of the Trade Adjustment Assistance Program. Assistance to firms and industries adversely impacted by imports will be supplied by EDA's traditional technical assistance, research and information programs. This effort will be further augmented by other Commerce programs such as NIST's Manufacturing Technology Centers, Minority Business Development Centers and the International Trade Administration's district offices, as well as the Small Business Development Centers administered by the SBA.

The 1994 S&E request of $30,151,000 is $3,033,000 greater than the fiscal year 1993 enacted appropriation, and $3 million above the fiscal year 1994 base. This increase will fund two essential initiatives: staff reinvigoration and ADP mainframe conversion and software enhancements.

The staff reinvigoration will include realignment of existing EDA staff to strengthen the budget, program evaluation and management analysis functions; augmentation of regional office operating budgets to upgrade post-approval, impact monitoring and evaluation; improve coordination with local, regional, and State economic development organizations; and strengthen regional strategies to facilitate the uniform application of Agency policies.

ADP mainframe conversion and software enhancements will allow the Agency to convert to a more efficient, economical system that provides management the timely and accurate data needed to make sound investment decisions. Limited funding in recent years has left EDA's main information systems for operational planning and control and fund accounting outdated, slow and fragmented.

The $223,150,000 provided for EDA's grant programs is $6,150,000 above the enacted fiscal year 1993 appropriation, and $19,280,000 above the fiscal year 1994 base. These investments form the basis for reviving EDA's leadership role in developing and advocating Federal policy, guidance and demonstration activities in the field of economic development and adjustment assistance programs. While new resources are allocated to support defense adjustment and the restoration of the research and evaluation program, the traditional EDA programs remain effective mechanisms for addressing economic development issues through partnerships between business, industry and government.

The resources will be used as follows:

$135,385,000 for Public Works to provide the infrastructure investment needed to support job retention and creation in areas experiencing high unemployment;

$52,075,000 for Title IX programs, including $33,000,000 to assist communities nationwide experiencing Sudden and Severe Economic Dislocation due to Defense Department actions, and $19,075,000 for the basic Title IX programs;

$35,120,000 for EDA's traditional capacity-building programs, including $24,770,000 to continue the current level of Planning, and $10,420,000 for Technical Assistance, including an increase of $1,420,000 to support additional local development strategies and national efforts to improve information dissemination and exchange among economic development practitioners; and $500,000 to restore the research and evaluation program.

Authorizing legislation for EDA will be included in the fiscal year 1994 Commerce legislative package. In addition to the requisite extension, the reauthorization will include minor changes to improve the Agency's operations. More extensive changes are under consideration as part of a strategic review of the Agency being conducted with the Department. We will keep the committee fully informed of any recommendations for further legislative changes or operational restructuring coming out of this effort.

The objectives of this effort are to expand EDA's target audience, simplify applicant eligibility, accelerate grant processing, and improve the timeliness and quality of assistance to our customers.

Mr. Chairman, that concludes my remarks. I would like to introduce the gentlemen I have with me today. Mr. Dave McIlwain is the Acting Deputy Assistant Secretary for Program Operations; Mr. Leon Douglas, Acting Deputy Assistant Secretary for Program Support; Mr. Joe Levine, Chief Counsel; Mr. Dave Witschi, Director of the Economic Adjustment Division; and Mr. Vince Goodman, Budget Officer.

Thank you, sir.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT BY CRAIG M. SMITH ACTING ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

April 22, 1993

Mr. Chairman and Members of the Subcommittee, thank you for providing me with this opportunity to appear here today to discuss the FY 1994 budget request for the Economic Development Administration (EDA), the first such budget request in 12 years. As a career, federal employee and speaking for the rest of EDA, let me say we're very excited at the prospect of being an integral part of President Clinton's and Secretary Brown's economic agenda.

FY 1994 APPROPRIATION REQUEST

For FY 1994, we are requesting $30.151 million for salaries and related expenses. This level of funding will fully support 355 full-time employees, including 49 Economic Development Representatives. In addition to salaries and related expenses, we are also requesting $223.150 million to provide grants for public works and development facilities, and other capacity-building types of assistance such as planning, technical assistance, and coordination which are needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically-distressed areas and regions. To facilitate the provision of this assistance and to accelerate its delivery of services, EDA is proposing to simplify the appropriations language; and most importantly, we will be submitting, also for the first time in 12 years, a legislative proposal reauthorizing the Economic Development Administration. Lastly, we are requesting termination of the Trade Adjustment Assistance Program. Assistance to firms and industries adversely impacted by imports will be merged with EDA's traditional technical assistance, research, and information programs as authorized by Title III of the Public Works and Economic Development Act of 1965. This effort will be further augmented by other Commerce programs such as the Manufacturing Technology Centers, the Minority Business Development Centers and the network of district offices of the International Trade Administration as well as the Small Business Development Centers administered by the Small Business Administration.

SALARIES AND EXPENSES (S&E)

The FY 1994 S&E request of $30.151 million is $3.033 million greater than the FY 1993 enacted appropriation and $3.000 million above the FY 1994 Base. This increase will fund two essential initiatives: 1) Staff reinvigoration; and 2) ADP mainframe conversion and software enhancements.

STAFF REINVIGORATION

Since 1982, the EDA staff structure has remained basically unchanged. As a result, the current staff alignment no longer maximizes the utilization of personnel and administrative resources. During FY 1994, EDA will realign existing staff to strengthen its budget, program evaluation, and management analyses. These changes will enable EDA to focus its development assistance programs on those initiatives that offer the greatest returns on federal investments. To achieve this objective, EDA is requesting an increase of four (4) FTEs and $1.250 million. These funds, in addition to staff, will be used to augment regional office operating budgets to achieve a more acceptable frequency of post-approval project monitoring and evaluation site visits; improve coordination with local, regional, and state economic development organizations; and enhance and standardize regional strategies to facilitate a uniform application of Agency policies and expectations nationwide.

ADP CONVERSION/MIGRATION

During the last 12 years, EDA's automated data processing and management information system has been financially limited to the point of cost-ineffectiveness. Prevailing circumstances only allowed for the maintenance of software developed in the 1970's with no funding to capitalize on technological alternatives. The result is that today EDA's two primary information systems, Operational Planning and Control and Fund Accounting, do not have the interrelationships necessary to provide timely, accurate data; the data have become fragmented, requiring extensive, time-consuming reconciliations. The requested increase of $1.750 million will enable EDA to convert to a more efficient, economical system and to upgrade its now obsolete software/hardware capabilities, thus providing management with data essential to make sound economic investment decisions. These changes will also increase staff productivity and strengthen EDA's internal control system by utilizing current technologies.

ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS

These investments form the basis for reviving EDA's leadership role in developing and advocating "federal" policy, guidance, and demonstration activities in the field of economic development and adjustment assistance programs. Though programmatically dormant for the past 12 years, EDA will now actively encourage economic development that maximizes the utilization of the Nation's manpower and capital, protects the environment, and alleviates adverse conditions resulting from technological changes, structural decline, economic dislocation, and long-term deterioration. To achieve these goals, EDA is requesting $223.150 million in FY 1994 economic assistance funds; this amounts to an increase of $6.150 million above the $217.0 million enacted in FY 1993 and $19.280 million over the FY 1994 base. In addition to requesting new funds for defense economic investment, we have reallocated resources to reflect better, more immediate program requirements. The FY 1994 budget requests a restoration of $0.5 million in the Research and Evaluation program. These limited funds will enable EDA to support leading-edge research in support of the overall economic mission of the Department of Commerce in the areas of industrial modernization, sustainable development and innovative infrastructure.

CAPACITY BUILDING AND INFRASTRUCTURE DEVELOPMENT

While the focus is on the future, EDA's traditional programs remain effective mechanisms for addressing economic development issues for promoting partnerships between business, industry, and government. During FY 1994, EDA will assume a more visible and stronger advocacy role geared towards empowering communities, areas, and states to take the lead in developing the economic development tools and environment which encourage private investment, stimulate entrepreneurship and enhance competitiveness and productivity. These capacity-building programs also include Technical

Assistance, for which we are requesting a FY 1994 budget of $10.420 million, an increase of $1.420 million, and Planning, which has a level request of $24.770 million. The increase in Technical Assistance will be used to conduct, at the local level, feasibility and industry studies, natural resource development, and export promotion; at the national level, the technical assistance increase will allow for information dissemination and exchange among elected officials and economic development practioners. In the area of Public Works, we are requesting $135.385 million. With the additional $48.9 million in Public Works funds requested in the FY 1993 Stimulus Supplemental, we anticipate awarding a greater number of jobs-creating grants this spring and summer which would otherwise have gone unfunded until FY 1994. EDA will continue to provide grants for infrastructure projects that foster the establishment or expansion of industrial and commercial businesses providing long-term employment to unemployed and underemployed residents of communities experiencing high unemployment, low per capita income, and outmigration. To complement the Department's visionary strategy towards competitiveness, EDA will put increased emphasis on projects that foster exports, entrepreneurship, and innovative technology.

DEFENSE ECONOMIC INVESTMENT

With an end to the Cold War, the United States must economically adjust to expanded competition in a world economy; but, as importantly, it must alleviate the adverse economic impact of military base closures and realignment and defense contract cancellations. One of the objectives of this Administration is to move these defense-dependent communities into more technologically-diverse economies. In this regard, EDA is requesting $33.0 million to assist communities nationwide experiencing sudden and severe economic dislocation resulting from the closure or realignment of military installations or the loss of defense-related contracts. EDA is using an aggressive, proactive two-part strategy to assist defense-impacted communities. First, EDA provides strategy grants to enable communities to determine goals and objectives that are most effective and compatible with their self-determined development needs and potential. Secondly, EDA will provide implementation grants to assist these communities in achieving their goal of self-sustaining, economic stability. We will continue to consult closely with the Department of Defense's Office of Economic Adjustment to carry out this initiative. These funds are in addition to the $19.075 million being requested for EDA's regular Economic Adjustment program.

AUTHORIZING LEGISLATION

In closing, I would like to state that included in the FY 1994 Commerce legislative package will be an EDA reauthorization proposal. In addition to the requisite extension, this reauthorization will propose several minor but essential changes necessary to improve current Agency operations. These changes will promote, as stated, operational efficiency; however, more substantive changes are under consideration as are modifications to the relevant Code of Federal Regulations. In the coming month, we will be working closely with the Department to undertake a strategic review of our mission, programs and organizational structure to ensure that EDA is effectively and efficiently serving the economic needs of the nation. We will continue to keep the Committee informed of any legislative changes we may propose or operational recommendations we may implement. The objectives of these initiatives is to expand EDA's targeted audience, to simplify applicant eligibility, and to accelerate grant processing.

CONCLUSION

Mr. Chairman, this concludes my Prepared Statement. Before we address questions from the Subcommittee, I would like to introduce the staff accompanying me today: David McIlwain, Acting Deputy Assistant Secretary for Program Operations; Leon Douglas, Acting Deputy Assistant Secretary for Program Support; Joe Levine, Chief Counsel; David Witschi, Director, Economic Adjustment Division; and Vince Goodman, Budget Officer.

Thank you, Mr. Chairman.

AUTHORIZING LEGISLATION

Mr. Smith of Iowa. Now, what is the status of your authorization?

Mr. Craig M. Smith. The authorization is being reviewed within the Commerce Department at the present time.

Mr. Smith of Iowa. When will it be sent up to the authorizing committee?

Mr. Craig M. Smith. The requisite reviews are taking place and as soon as they are finished, it will forward. I don't know the exact date.

Mr. Smith of Iowa. We have had authorizing legislation pass the House, in spite of the fact the Administration was opposed to it over a number of these years. Therefore we have not been able to get a final authorization. It looks like this might be the year when we can finally get an authorization. So the questions I am about to ask mean more than they have in previous years.

We have this idea about areas that are experiencing high unemployment getting targeted as priorities. It is a pure farce, and it has been all these years. They get the census tract, they put together some kind of a meandering line here and say, that is the area. It totally ignores normal transportation patterns.

You try to help that area, and it may be that the people who are going to work in that area don't actually live there. It just doesn't work.

Now, are you proposing to do anything different in this authorizing legislation?

Mr. Craig M. Smith. The authorizing legislation we have right now makes only minor changes in terms of our operations and does not address designated areas.

Mr. Smith of Iowa. This has been one of the biggest shortcomings in the EDA program, one reason that a lot of people really don't support it. We supported EDA; but a lot of people look at it and say, look, until you do something about this, it is really not going to help us on a national basis to develop jobs in this country. You know what I am talking about, don't you?

Mr. Craig M. Smith. Yes, sir.

Mr. Smith of Iowa. Well, I hope that in the authorizing legislation that you make some proposals that recognize the shortcomings in this approach. They have done it all over the country. I mean, it is just a common thing. They just do that to try to get above 5.6 percent or whatever it may be. By the time they get the thing all together and you get your application in, the unemployment has probably changed anyway.

Mr. Rogers?

Mr. Rogers. How would you then propose changes to target your monies to the distressed areas?

Mr. Craig M. Smith. At the present time, the information that we used is based on unemployment rates as supplied to us by the Department of Labor. We compare an areas two-year average unemployment rate against the national average. I would really have to defer the question at this point and supply an answer for you at a later date.

[The information follows:]

EDA DESIGNATION

For EDA designation, an area must meet all of the following criteria:

(a) A 24-month unemployment rate which exceeds the national rate for the same period. Data is provided by the Department of Labor.

(b) Median family income less than or equal to $9,958. This is the latest available median family income; however, it is anticipated that this amount will increase based on data derived from the 1990 Census.
Census.

(c) Per capita employment loss of at least 1.2 percentage points and outmigration having occurred between the latest two decennial census periods, 1980 and 1990.

ACCELERATING GRANT PROCESSING

Mr. ROGERS. You indicate on page 4 of your justifications that the EDA is reviewing both the authorizing legislation and Federal regulations pertaining to its program. You plan on eliminating or revising over half the rules and regulations, thus reducing the burden imposed on the grant applicants, and, hopefully, accelerating the processing of grants.

Can you tell us why that is being done?

Mr. CRAIG M. SMITH. Would you repeat that for me, sir?

Mr. ROGERS. Why are you proposing to rewrite the rules and regulations on the grant process?

Mr. CRAIG M. SMITH. Joe, our legal counsel.

Mr. LEVINE. Mr. Rogers, my name is Joe Levine, EDA Chief Counsel. Basically nothing has changed in terms of the rules and regulations since 1981. We feel there is a lot of excess baggage and changed circumstances that could be vastly improved by this effort.

Mr. ROGERS. Well, is it safe to say that you want to cut the red tape so we can get grants approved more quickly?

Mr. LEVINE. Absolutely.

Mr. ROGERS. So you are going to cut the rules and regulations in half?

Mr. LEVINE. Well, we are going to try.

Mr. ROGERS. So as to speed up the process?

Mr. LEVINE. Absolutely.

Mr. ROGERS. How long does it currently take a typical grant application to make it through the process now?

Mr. CRAIG M. SMITH. It usually takes about six months, 180 days.

Mr. ROGERS. What do you hope to reduce that to?

Mr. CRAIG M. SMITH. At this time, we have what we call a decentralization committee working very diligently on that; and we have also designed some new application forms. Lastly, we are working with the Department on a processing review. As a matter of fact, we are meeting currently on that, and we hope to cut processing down by about two months.

AUTHORIZING LEGISLATION

Mr. ROGERS. Now, who is now putting together the authorizing legislation that will be sent up to the Congress?

Mr. LEVINE. Well, the authorizing legislation for fiscal year 1994 is basically a simple reauthorization bill to provide us authority for the following year and the decisions on fiscal year 1995. Proposed, entirely new major amendments to the statute, I think, we are waiting for a new Assistant Secretary and other policy makers to be in place.

Mr. Rogers. Do you anticipate that the overhaul will take place for fiscal 1994 or 1995?

Mr. Levine. 1995.

Mr. Rogers. So for 1994 you are going for a simple reauthorization with minimal changes?

Mr. Craig M. Smith. That is correct.

Mr. Rogers. Is that what you have in mind?

Mr. Craig M. Smith. That is correct.

PUBLIC WORKS FUNDING

Mr. Rogers. You requested an extra $49 million in the emergency stimulus package for the Title I public works grant program. But in your 1994 budget request that program is cut by $12.1 million, over 8 percent. Can you explain why that is so?

Mr. Goodman. Yes, sir. That cut is consistent with the reprogramming that was partially approved in January, some 4 million dollars. We anticipate additional reprogramming submissions to the Congress consistent with Section 205 of the general provisions of the 1993 Appropriations Act. As a result, the 1994 request is consistent with the 1993 operating level.

So where it shows a decrease from enacted appropriation to request, there is really no decrease, except for a minor reallocation between the operating level in 1993, and that which we are proposing in 1994.

Mr. Rogers. Well, we look forward to seeing the new authorizing legislation that will be sent up, and we thank you for being here.

Mr. Smith of Iowa. Mr. Mollohan.

Mr. Mollohan. Well, thank you, Mr. Chairman. I would just like our witness to speak to the Economic Development Assistance Program and how that is being impacted by this budget request.

Mr. Craig M. Smith. Could you rephrase that?

Mr. Mollohan. The Economic Development Assistance Program, you are asking for an increase of $19.28 million?

Mr. Craig M. Smith. Oh, I see, yes, Economic Adjustment; that is the Title IX Program.

Mr. Mollohan. Right.

Mr. Craig M. Smith. That is a little less than last year. Last year it was $22 million.

Mr. Mollohan. So it is not an increase?

Mr. Craig M. Smith. No, sir.

Mr. Mollohan. Why is it experiencing a decrease?

Mr. Craig M. Smith. It is an internal reallocation.

Mr. Mollohan. What programs does that impact?

Mr. Craig M. Smith. What programs does it impact?

Mr. Mollohan. Yes, sir.

Give me an example of where that money will be allocated?

Mr. Craig M. Smith. Sudden and Severe Economic Dislocation and our Long-Term Economic Deterioration programs through which we work with those areas that experience a plant closing or a sudden loss of jobs.

Also we work in those areas that are experiencing long-term deterioration. We use these programs for revolving loan funds and other types of projects in that area.

COMPOSITION OF FY 1994 PROGRAM REQUEST

Mr. MOLLOHAN. Why are you decreasing the Economic Assistance Development Program? Do you see a decrease in the need for that assistance?

Mr. CRAIG M. SMITH. No. We had only a finite amount of funds, and we had to do a little internal reallocation. We felt that the reallocation would not adversely impact that program.

Mr. MOLLOHAN. Okay. What programs experienced an increase in funding?

Mr. CRAIG M. SMITH. In the Technical Assistance Program, we gave the regional offices some additional funds so that they could work with the local communities and do TA-type studies; and we put $500,000 into Research.

Mr. MOLLOHAN. What about the conversion activity in EDA? You are asking for a significant increase for that purpose.

Mr. CRAIG M. SMITH. $33 million, yes, sir.

Mr. MOLLOHAN. That is a new request, is it not?

Mr. CRAIG M. SMITH. Yes, it is.

Mr. MOLLOHAN. Were any of the traditional programs, for example, the Economic Development Assistance Program, cut in order to help fund the conversion activity?

Mr. CRAIG M. SMITH. No, no, sir. Those were new funds.

Mr. MOLLOHAN. Those were new funds.

Now, If I understand your answers in response correctly.

Mr. CRAIG M. SMITH. Go ahead, sir.

REDUCING GRANT PROCESSING TIME

Mr. MOLLOHAN. You plan to shorten your application process considerably, is that correct?

Mr. CRAIG M. SMITH. Yes, sir.

Mr. MOLLOHAN. Does this apply to all EDA grant programs?

Mr. CRAIG M. SMITH. We are working on Public Works and Economic Adjustment at the moment, first, to see how that is going to work; and hopefully, we will be able to extend it to other programs.

Mr. MOLLOHAN. The economic adjustment, is that——

Mr. CRAIG M. SMITH. That is the Title IX funds that you asked about, the Long-Term Economic Deterioration program.

Mr. MOLLOHAN. This is the fund out of which, a project in West Virginia would apply for a grant in order to promote economic development?

Mr. CRAIG M. SMITH. No, sir. That would come out of our regular Public Works program.

Mr. MOLLOHAN. That is out of the public works fund?

Mr. CRAIG M. SMITH. Yes.

Mr. MOLLOHAN. What is the average application time for applicants who are trying to get money out of the public works fund?

Mr. CRAIG M. SMITH. Six months, 180 days.

Mr. MOLLOHAN. Okay, six months is the average turnaround time?

Mr. CRAIG M. SMITH. Yes, sir.

Mr. MOLLOHAN. So that means that for pending applications, if the average has been six months in the past and we are waiting 12 months to get applications approved, then somebody, someplace, is getting applications turned around in three months?

Mr. Craig M. Smith. Before we receive an application, our EDRs have worked with the community in developing an application for a viable project.

I am talking about the six months average from the time of receipt of that project; it might have taken longer to develop that project.

Mr. Mollohan. I am talking about EDA processing of applications.

Mr. Craig M. Smith. Yes.

Mr. Mollohan. Okay. Well, that is terrific and I look forward to talking with you about the time frame in which these applications are processed. And your goal is four months?

Mr. Craig M. Smith. Four months.

Mr. Mollohan. I am sure you are serious about that, and that would be tremendous. So we look forward to working with you in turning these things around in a four-month period.

Mr. Craig M. Smith. We hope to go to approval in a four-month period.

Mr. Mollohan. Thank you very much. I look forward to working with you.

Thank you, Mr. Chairman.

ELIGIBILITY AND SELECTION CRITERIA

Mr. Smith of Iowa. Well, I think that is obviously good, but what I was referring to largely is what happens before you get the application. It is torture trying to figure out what kind of an application and what kind of an area would be approved. By the time you get through with it, the statistics have probably changed and they totally ignore the fact that in some instances, where the people who are unemployed would normally go on public transportation or whatever transportation is available to them, it isn't available in that area. It doesn't make any sense.

I assume you will still give primary attention to try to help nonprofit applicants get to the stage where they can get other financing-in other words, the planning, and getting them started. I mean, that is what we have been largely doing the last several years. And with this still limited amount of money, that will have to be the principal focus, won't it?

Mr. Craig M. Smith. Yes, sir.

Mr. Smith of Iowa. Because; you used to have $750 million; you could do a lot more then. But since you don't have so much money, what we have been focusing on is trying to help some local community or some local development group get to the point where they could sell bonds or do whatever it may be. It is a valuable service, provided we can get there faster than we have in the past or be a little more practical about these things when comparing one area to another.

Any more questions?

Mr. Mollohan. No, Mr. Chairman.

Mr. Smith of Iowa. Okay. Thank you very much.

Mr. Craig M. Smith. Thank you.

Mr. SMITH of Iowa. After the authorizing legislation is presented, we may have a number of questions we will submit to you.

Mr. GOODMAN. Thank you, sir.

Mr. CRAIG M. SMITH. Yes, sir. Thank you.

[The following questions were submitted to be answered for the record:]

QUESTIONS FOR THE RECORD FROM CHAIRMAN SMITH

ECONOMIC DEVELOPMENT ADMINISTRATION

Defense Conversion Assistance

QUESTION:

You are requesting a program increase of $33 million for economic assistance grants to assist communities impacted by Department of Defense base closures and procurement reductions. This increase is requested as part of the investment proposals in the President's Budget, which includes language making these funds available only upon enactment of a budget reconciliation act which raises the budget caps for FY 1994.

a. Since you have already received similar funds via transfer from the Department of Defense in FY 1991 and FY 1993, why is this request considered an investment rather than a continuation of the base program?

b. What would be the impact on your ongoing efforts in the area of defense conversion if you do not receive this requested increase?

ANSWER:

a. Although the defense adjustment funds are being spent under the existing Title IX (Sudden and Severe Economic Dislocation) program, the magnitude of defense downsizing warrants specific emphasis as our objective will be to reinvest the Cold War industrial, technological and workforce capabilities into our effort to make the nation globally competitive.

b. Competition among projects would be extremely intense and a considerable amount of community adjustment needs would not be met. Absence of such funds would also negate a substantial portion of the strategy plans now being developed as the Agency would be unable to provide requisite implementation grants.

QUESTION:

You have received a total of $130 million by transfer from the Department of Defense in fiscal years 1991 and 1993. What amount of those funds have been committed and obligated to date? When will these funds expire?

a. Are you experiencing any difficulties in coordinating with the Defense Department on these grants?

b. Do the coordination requirements with DOD differ for the FY 1991 funds and the FY 1993 funds?

ANSWER:

The first installment of $50 million (appropriated in FY 1991) remains available until expended. The second installment of $80 million (appropriated in FY 1993) remains available until September 30, 1994. Of the combined amount of $130 million, 48 proposals valued at $67 million have been invited to apply for grants, of which 19 grants totaling $24 million have been awarded.

a. EDA and DOD's Office of Economic Adjustment work closely together at both the field and headquarters levels to identify and develop proposals for base reuse and community economic adjustment.

b. The first installment of $50 million from DOD was being administered through a Memorandum of Agreement (MOA) between EDA and DOD. Because of the close and satisfactory working relationship between the two agencies, the second installment of $80 million was transferred without an MOA, The original MOA was mutually terminated. The only change in project development and approval procedures is that DOD's formal, written concurrence on each project is no longer required.

QUESTION:

How do the funds you are requesting under the investment proposals for defense conversion differ from the amounts you have received from DOD--are there requirements associated with the DOD funds that will not apply to the funds you are requesting for FY 1994?

ANSWER:

In virtually all respects, the funds being requested under the investment proposals for defense conversion will be subject to the same programmatic and administrative requirements that apply to the funds transferred to EDA from DOD.

QUESTION:

Do you know if the Department of Defense is requesting any additional funds for economic conversion programs in its FY 1994 budget request? If so, what steps are you taking to avoid duplication between those funds and your program?

ANSWER:

Department of Defense is requesting funds to continue the base reuse planning functions of DOD's Office of Economic Adjustment. Although EDA Title IX funds can be used for base reuse planning, EDA will continue its practice of avoiding duplicate funding of activities eligible for OEA assistance. In some circumstances, EDA may fund complementary adjustment planning projects that deal with the balance of a community not covered by an OEA funded base reuse plan.

Trade Adjustment Assistance Termination

QUESTION:

The President's Budget requests termination of the Trade Adjustment Assistance program which provides assistance to firms and industries adversely impacted by imports. Your statement indicates that this reduction is proposed because other programs within EDA and the Commerce Department (particularly the NIST manufacturing extension program), as well as the SBA Small Business Development Centers, can provide similar assistance.

a. There are 12 existing Trade Adjustment Assistance Centers (TAACs). Where are these located, and what sort of planning went into determining the location of these existing centers?

ANSWER:

Following is a listing showing the name and location of the 12 existing TAACs:

NEW ENGLAND TAAC:	New England Trade Adjustment Assistance Center, Inc. Boston, MA
NEW YORK STATE TAAC:	State University of New York SUNY Binghamton, NY
NEW JERSEY TAAC:	New Jersey Economic Development Authority Trenton, NJ
MID-ATLANTIC TAAC:	MidAtlantic Employers' Association Blue Bell, PA
SOUTHEASTERN TAAC:	Georgia Institute of Atlanta, GA

GREAT LAKES TAAC:	University of Michigan Ann Arbor, MI
MIDWEST TAAC:	Applied Strategies International Chicago, IL
MID-AMERICA TAAC:	University of Missouri Columbia, MO
SOUTHWEST TAAC:	University of Texas at San Antonio San Antonio, TX
ROCKY MOUNTAIN TAAC:	University of Colorado Boulder, CO
NORTHWEST TAAC:	Trade Task Group Seattle, WA
WESTERN TAAC:	University of Southern California Los Angeles, CA

The Trade Adjustment Assistance Centers (TAACs) were established in September 1978. The original ten TAAC service areas were determined by a detailed analysis of the national geographic distribution of industries which were experiencing import impaction. This included an assessment of the location of previously certified firms and worker groups certified by the Department of Labor under the Trade Act of 1974.

As experience was gained and the program grew, TAAC alignments changed. The original territory of the Western TAAC at Los Angeles included all the area currently the responsibility of the Northwest TAAC located in Seattle, WA. Also, the original Mid-America TAAC, now based in Columbia, MO, included much of the area currently serviced by the Rocky Mountain TAAC in Boulder, CO.

Further experience warranted the creation of the Great Lakes TAAC at Ann Arbor, MI and transferred the servicing of the states of Michigan, Ohio, and Indiana from the Midwest TAAC in Chicago, IL. The last change in June 1989 consolidated service for the state of New York from two TAACs to one.

QUESTION:

I am certain that many Members of the Subcommittee have been (or will be) visited by representatives of the Trade Adjustment Assistance program who will argue that the TAACs provide a unique service that will not be covered by other Federal assistance delivery systems. How do you respond to that argument?

ANSWER:

The decision not to request funding in the FY 1994 budget for the Department of Commerce's TAAC was made with a great deal of concern for the impact on firms and individuals. The President's Budget included funding for a wide variety of business assistance programs, and we believe affected firms can get the assistance they need through these programs. In particular, Commerce's expanded Manufacturing Technology Centers program and its 47 Minority Business Development Centers are well suited to provide the needed assistance. Additionally, these firms can receive assistance through the programs offered by the hundreds of Small Business Development Centers supported by the Small Business Administration. In short, the President's Budget provides, and in many cases increases, funding for assistance to businesses in every State.

QUESTION:

Within your Salaries and Expenses account, you are transferring 15 positions and $793,000 from the Trade Adjustment Assistance line to a new program for Special Impact Assistance.

a. What have the responsibilities of the trade adjustment assistance staff been?

b. What will be the responsibilities of the special impact assistance staff, and how have these types of activities been handled in the past?

c. Are all of these positions located at EDA headquarters?

d. Will any employees be adversely impacted by these changes?

ANSWER:

a. Approximately 50 percent of the TAA staff is devoted to certification. Certification is the process whereby a firm petitions for eligibility to be certified as having been adversely affected in terms of sales or production and employment by increasing imports of competitive products. TAA staff is responsible for investigating and analyzing such petitions. Remaining TAA staff is responsible for providing technical assistance which includes reviewing economic recovery plans (adjustment proposals) of previously certified firms and the administration of industry assistance. Industry assistance is geared towards problems and/or opportunities in technological innovations, management, export production, etc. on an industry-wide basis.

b. Responsibilities of the Special Impact Assistance Division will be the coordination of overall economic development assistance in areas of disaster, defense economic conversion, and other industry adjustment assistance. Previously, these responsibilities were carried out on an individual program basis, i.e. Planning, Public Works, Economic Adjustment, etc.

c. All 15 positions will be located in EDA headquarters.

d. EDA does not anticipate the issuance of any adverse personnel actions as a result of this proposal.

Environmental Protection

QUESTION:

Your budget justification (page EDA-2) refers to supporting development that, while making the best possible use of manpower and capital, protects the environment and conserves our natural resources. Is this environmental emphasis a new focus for EDA?

ANSWER:

No. Since the inception of the National Environmental Policy Act (NEPA), EDA has had an ongoing program that requires a review of program activities to ensure a proper balance between the goals of economic development and conservation of natural resources, and that adverse environmental impacts are mitigated or avoided to the extent possible.

QUESTION:

Could you describe for us some examples of what you are doing in this area? What level of resources are currently devoted to environmental protection and resource conservation? Are you providing any related training to your regional and headquarters staff?

ANSWER:

EDA's environmental program has continued to expand to meet the steadily increasing environmental requirements from legislation such as the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the

Clean Water Act. For example, in 1992 a new policy directive was formulated to address the issues related to hazardous waste liability related to environmental cleanups under CERCLA. Currently, environmental issues related to DOD base closures and the timing of economic development are presenting a new challenge to environmental compliance in accordance with the NEPA environmental review which often takes several years to complete.

Annually, EDA prepares approximately two hundred to three hundred environmental assessments (EAs) in accordance with the NEPA. These EAs are prepared by a staff of five Regional Environmental Officers (REOs), along with the technical and policy support of two headquarters Environmental Protection Specialists.

Formal training is obtained primarily through private contractors; however, there is frequent contact with the Environmental Protection Agency (EPA) through the headquarters staff liaison efforts. The headquarters Senior Environmental Specialist is a member of the EPA Federal Agency Roundtable, and the EPA Civilian Federal Agency Task Force. The Agency's environmental staff meets in an annual workshop to review and discuss environmental policy and technical issues in order to improve the environmental review process. The REOs disseminate this information to the regional staff in periodic regional workshops and meetings.

FY 1992 EDA research funds were used to produce a "decision aid to assist State and local authorities in planning and managing urban, suburban, and rural growth and development while preserving community character." This growth management study was called for by Title III of the Global Change Research Act of 1990 which directed the Secretary of Commerce to carry out the effort. EDA research and technical assistance funds were also used in FY 1992 to study the impacts of international carbon taxes on regional and state economies and to fund a forum exploring the economic development opportunities available from recycling and environmental technology.

Research, Evaluation and Demonstration Program

QUESTION:

You are including in your request funding for the research, evaluation and demonstration program under the EDA program grants account. The Committee did not provide funds for this purpose for FY 1993. What has been the impact of this reduction on the EDA programs?

ANSWER:

With funds unavailable for research, evaluation, or demonstration projects in FY 1993, EDA has not been able to fund new studies exploring current and critical topics vital to guiding economic development strategies for the U.S. For example, continuing efforts such as the growth management study completed in October, 1992, and conducted in response to Congressional direction contained in Title III of the Global Change Research Act of 1990, cannot be undertaken.

QUESTION:

How will the requested $500,000 be allocated in FY 1994? What types of organizations will be the recipients of these research grants?

ANSWER:

The $500,000 allocation requested for research, evaluation, and demonstration will be spent on competitively selected projects recommended by a panel of qualified and experienced economic development professionals. Although there are few eligibility restrictions for this program, projects are typically undertaken by qualified university researchers and knowledgeable, non-profit organizations with years of experience in the economic development field.

QUESTION:

Are there not other mechanisms that exist within EDA or in the private sector for conducting this type of research?

ANSWER:

There are no other programs within EDA for funding this type of research, and there are limited funds available from the private sector to support this work. EDA leverages other funding resources whenever possible, but the importance of having EDA funds available lies in the ability to pick projects of vital Agency and public concerns.

QUESTION:

One example of a research project mentioned in your budget justifications (page EDA-6) is the examination of defense base closures and conversions, and the creation of a base-closure database. Will this duplicate any ongoing efforts by the Defense Department or other Federal agencies?

a. How will DOD be involved in this effort?

b. How will the resulting database be used, and will have access to the information?

ANSWER:

The research project mentioned on page EDA-6 was a proposal received by EDA in FY 1992 when available funds had been fully committed. This was a potential project that had the support of DOD but could not be funded in FY 1993 as no Research funds are available. It is now our understanding that a similar, scaled-down project is being funded from private sources.

Interaction with NIST

QUESTION:

You refer in your justifications (page EDA-6) to EDA's efforts to promote "synergism" between all Commerce economic growth programs, particularly the National Institute of Standards and Technology (NIST). How do you propose to accomplish this coordination, and what resources do you plan to use for the joint EDA/NIST projects?

ANSWER:

The proposed coordination will be accomplished through the establishment of an interagency task force at the Deputy Assistant Secretary level. An objective of this task force will be to identify those areas where the Agencies can coordinate assistance programs, i.e., in the area of Manufacturing Technology Centers. EDA will utilize existing resources, primarily Public Works, Technical Assistance, and staff.

Legislative and Regulatory Review

QUESTION:

Page EDA-4 of your budget justification indicates that EDA will be reviewing both its authorizing legislation and Federal regulations, and that you anticipate that over one-half of the existing rules and regulations can either be deleted or substantially modified. Could you summarize for us the categories of rules and regulations you are considering in this review?

a. Will you begin this review in FY 1993?

b. If so, do you expect any regulatory changes to occur in FY 1993 that might impact grant awards over the remainder of the year?

ANSWER:

All of EDA's regulations, found at Chapter III of Title 13 Code of Federal Regulations, are presently under review. It is very unlikely that this review will have any impact on FY 1993 awards since projects likely to be funded this year are already well into the processing cycle.

QUESTION:

You indicate that, as a result of this review, the burden imposed on grant applicants will be reduced and grant processing will be greatly accelerated. Do you have any estimates of the savings--in both funding and time--that will result from this review?

ANSWER:

Savings from efficiency that revised grant processing procedures will generate are estimated to exceed $500 thousand. Our objective is to improve processing time from an average of six months down to four months. The revised procedures we are working to develop should also result in a less costly process for the applicant.

QUESTION:

What is the status of your review of authorizing legislation--when will the Administration be submitting proposed legislation to the Congress?

ANSWER:

The Administration's proposed authorizing legislation for FY 1994 should be submitted to Congress within the next few weeks. While we anticipate submitting more substantive revisions in the future, the formulation of these proposals awaits the appointment of a new Assistant Secretary for Economic Development.

QUESTION:

Has the authorizing committee scheduled any hearings on reauthorization of economic development programs? Do you have any idea what the schedule might be for this legislation, and whether the authorizing committee will be considering any major changes in your reauthorization that is not being addressed in the Administration's proposal?

ANSWER:

We have been informally advised that hearings will be conducted during the month of May. We hope that the Administration's proposal will be submitted in time for early enactment to allow for full-year implementation.

Salaries and Expenses

QUESTION:

You are requesting a program increase of $3 million for your Salaries and Expenses appropriation. According to your statement, these increases are for staff reinvigoration and automation enhancements. Your statement mentions a staff increase of four FTE. Will these resources be assigned to headquarters or regional offices? Please provide details, if necessary, for the record.

ANSWER:

The requested increase of four FTE will be assigned to EDA headquarters. Three FTE will be assigned to the Budget Division and one FTE will be assigned to the Operations, Review and Analysis Division. All four positions will be in the mid-level grade range, GS-9/13.

QUESTION:

A portion of your requested increase under S&E is devoted to increasing your budget staff and expanding management and program analysis capabilities. You mention existing deficiencies in your budget formulation and execution functions.

a. What are these existing deficiencies, and how will this requested increase correct those?

b. Have these deficiencies been identified by the Commerce Inspector General, and has the IG been involved in your proposals to correct these?

ANSWER:

a. The increase of three FTE in the Budget Division will have responsibilities in day-to-day, technical operations. Such expanded structure will allow the two senior budget analysts to devote more time to analyzing budget impact and the adequacy/inadequacy of funding allocations, both in headquarters and in the regions. The Budget Officer will focus on policy development and implementation.

b. Existing deficiencies were determined by the Budget Officer and the Deputy Assistant Secretary for Program Support. The determinations are somewhat self-evident in that three employees are currently responsible for all facets of financial management including direct appropriations and the maintenance of the Economic Development Revolving Fund. The Office of the Inspector General was not involved in these determinations.

QUESTION:

How does your proposed increase for management and program analysis functions relate to the Department's request under

General Administration for expanded Commerce-wide program reviews?

ANSWER:

Increases in internal EDA management and program analysis functions will be ongoing and complement similar reviews which may be undertaken from time-to-time by the Department.

ADP Upgrade

QUESTION:

You have requested an increase of $1,750,000 (as part of the $3 million under S&E) for ADP mainframe conversion and software enhancements. What is your automation system currently used for?

ANSWER:

The EDA automated management information system is used to track the processing, approval and post-approval monitoring of EDA applications and projects, and to support other EDA activities, both program and administrative. This system includes two main applications: (1) the Operations Planning and Control System (OPCS) which is the main project processing and tracking system, and (2) the Fund Accounting System which is the detailed accounting for reservation, obligation and disbursement of funds for EDA projects.

In addition, EDA has a number of smaller automated systems. These include: (a) the Loan Accounting system which provides the detailed accounting for the remaining portfolio of EDA Public Works and Business Development loans; (b) a system containing data relating to population, unemployment and income needed to make the determinations of area eligibility for EDA assistance; and (c) systems for producing bills for EDA loan and other accounts receivable payments and for providing necessary information to credit reporting agencies in compliance with the Federal Credit Reporting Act. EDA also has systems based on its own Fund Accounting system which provide the automated record keeping to support the EDA Accounting Division in its reimbursable work on behalf of several smaller Department of Commerce bureaus for their grant activities.

Finally, the EDA systems provide office automation support for EDA staff in headquarters and our regional and EDR offices.

QUESTION:

How will this system integrate with the Department's proposed financial management system?

ANSWER:

In the mainframe conversion, our strategy will be to make minimal changes to the systems which will potentially be related to the Department's proposed financial management system. This will be mainly in the area of the fund accounting systems. We will assure, as part of the conversion, that the data and or functional interchanges which might be developed in the Departmental system will be in a condition that these linkages can be made with minimal future costs or effort.

QUESTION:

Are you devoting any FY 1993 resources to this computer upgrade? If so, how much and for what purpose?

ANSWER:

In FY 1993, only staff resources will be used in preparation for the conversion activity. Mainly during FY 1992, our Information Systems Division carried out a preconversion study and extensive inventory of the programs and data in the Agency. This information has been updated and is being more fully documented by existing staff in order to minimize costs and maximize efficiency in the conversion efforts. In addition, senior staff throughout the Agency will be involved in policy, management and strategy development sessions needed to assure that the converted systems meet the needs of workers and managers in the Agency in a modern and efficient manner.

QUESTION:

Have you selected a contractor for this automation project? If so, what company has been selected? If not, when will you go out with a request for proposals?

ANSWER:

No contractor has been selected for the automation project at this time. Our planning activities, which have begun, will lead to the development of needs assessments, requirements and constraints which will become the basis for statements of work and requests for proposals which may be issued as early as late this fiscal year (FY 1993) for a contract (or contracts) to be awarded in FY 1994 with the requested funds. As a part of this effort, we are working closely with the Department's Offices of Information Resources Management and of Procurement.

FY 1993 Proposed EDA Reorganization

QUESTION:

Earlier this year, the Commerce Department sent up a reorganization proposal to the Committee which made significant changes in the organization of EDA. The Committee received a number of comments both against and in favor of the proposed reorganization. The Committee decided to deny the reorganization at that time, preferring to wait until the new Administration came in and reviewed EDA's organizational structure.

a. Has such a review taken place, and does the budget proposal reflect similar organizational changes?

b. How is management working to address the concerns of the EDA employee union representatives regarding this proposal?

c. Please provide for the record a detailed description of the organizational proposals included in this request.

ANSWER:

a. As of April 28, 1993, the new Administration for EDA was not in place; thus, no subsequent review has taken place. Once a new Administration is in place a number of options will be considered.

b. EDA has and will continue to involve its Union, AFGE Local 3810, in any personnel-related proposals. In addition, EDA will inform the Committee in advance before implementation of any proposed organizational changes.

c. The only organizational change reflected in the FY 1994 Budget is the functional realignment of the Trade Adjustment Assistance (TAA) staff. Under the pending request, EDA is proposing the termination of the TAA program; however, the existing staff would be reassigned to the Special Impact Assistance Division. Responsibilities of this new division will be the coordination of overall economic development assistance in areas of disaster, defense economic conversion, and other industry adjustment assistance.

University Centers

QUESTION:

What is the status of the awarding of fiscal year 1993 funds for University Centers? Will any new Centers receive funds in FY 1993? Will any of the University Centers funded in FY 1992 not receive funding this year?

ANSWER:

FY 1993 renewal grants, totalling approximately $2 million, have been approved for 17 of the 64 University Centers. The majority of the University Center grants are due for renewal in the third and fourth quarter of the fiscal year. EDA does not expect to fund any new University Center in FY 1993. EDA expects that all 64 University Centers funded in FY 1992 will be refunded in FY 1993.

QUESTION:

How was the funding level for each Center determined?

ANSWER:

The FY 1993 funding level for each University Center is approximately two percent less than its FY 1992 funding level. The FY 1993 appropriation for the University Center program was similarly reduced and EDA applied the difference equitably consistent with Congressional intent.

QUESTION:

Under the current funding structure and appropriation level, what is the maximum amount a University Center can receive? Will the funding for each existing center change in FY 1994?

ANSWER:

The largest FY 1993 University Center grant will be for $239,625. The service area for this University Center includes Hawaii, American Samoa, Guam, the Northern Marianna Islands, the Republic of the Marshall Islands, and the Federated States of Micronesia. The remaining 63 University Centers will receive FY 1993 grants of either $102,425, $107,325, or $122,025 based on its prior-year funding level.

EDA is proposing to hold an open competition for University Center funding during FY 1994. All institutions interested in participating in the University Center program would be required to compete for the available funding. Under such a competition, the funding levels would very likely change.

QUESTION:

The budget request for the entire Department of Commerce indicates an effort to reduce program redundancies wherever possible. Are the existing University Centers not redundant to other EDA technical assistance programs? What unique service do these Centers provide?

ANSWER:

The University Center program does not duplicate other EDA Technical Assistance programs. A major objective of the University Center program is to make the resources--faculty, students, libraries, computers, etc.--of higher education institutions available for local economic development. Many University Centers focus their programs on assisting units of local governments (including economic development districts) and nonprofit organizations in conducting their economic development programs.

Economic Development Representatives

QUESTION:

The Department of Commerce Inspector General has been quite vocal in his criticism of the earmarking in bill language for Economic Development Representatives (EDRs). I note that the request includes funding for 49 EDRs but deletes the restrictive bill language governing where those positions are to be located.

a. Have you developed a plan for shifting these positions geographically? If so, please provide a summary of that plan for the record.

b. Will there be any adverse impacts associated with shifting these EDR positions?

ANSWER:

a. No plan has been developed for geographically shifting any positions, including EDRs. Removal of the EDR language is being proposed merely as a matter of appropriation languages simplification. At present, the only EDR realignment under consideration is the intra-state move of a soon-to-be vacant position in the State of Missouri.

b. At this time, we do not anticipate shifting any EDR positions.

QUESTION:

Do you intend to maintain the national EDRs in this budget request?

ANSWER:

The FY 1994 Budget Submission fully maintains the two existing National EDRs as well as the 47 EDRs located in the regions.

Economic Development Revolving Fund

QUESTION:

The Committee has rescinded funds from the Economic Development Revolving Fund for the past several years. What has been the impact of these reductions?

ANSWER:

Because of the ratio between assets and liabilities, including contingencies, previous rescissions had no impact on the liquidity of the Economic Development Revolving Fund.

QUESTION:

What is the contingent liability for outstanding EDA loan guarantees, and what are the unobligated balances expected to be in the fund at the end of FY 1992?

ANSWER:

At the beginning of FY 1993, the contingent liability for EDA's loan guarantee portfolio was $33.236 million. At present, the Agency projects the FY 1993 end-of-year unobligated balance in the Revolving Fund to be $137.578 million; this amount is $3.0 million greater than the FY 1992 unobligated, end-of-year balance of $134.578 million. At present, we feel these unobligated balances should be adequate to address contingent environmental cleanup costs.

QUESTION:

The Committee did not provide subsidy funding for any new loan guarantees in FY 1993. Have the funds provided for FY 1992 been obligated to date? Was there consideration given during your planning cycle to requesting a restoration of loan guarantees for EDA?

ANSWER:

No new loan guarantees were made in FY 1992. Therefore, the $800,000 appropriated for FY 1992 subsidies did not require obligation and lapsed at the end of FY 1992.

Because of the absence of an Assistant Secretary, this issue has not been discussed. Once an Assistant Secretary is on-board, we will consider it.

Request to OMB

QUESTION:

What was your initial request to the Department for all EDA accounts, what was the Department's request to OMB, and what items were eliminated from those requests? What will be the impact of those eliminations on the ongoing programs of EDA?

ANSWER:

The FY 1994 requests to the Department and to OMB were both $9.4 million. These requests reflected FY 1994 as being the second year of the perennial proposal to eliminate EDA. The $9.4 million was intended solely for the salaries and expenses of residual EDA. Because of this approach, no items were eliminated but rather restored by OMB. These restorations are reflected in the FY 1994 request to Congress.

QUESTIONS FOR THE RECORD FROM CONGRESSMAN TAYLOR

University Center Program

QUESTION:

I have been very impressed with the EDA University Center Program. The program: (1) fosters economic development; (2) provides technical and business assistance to business and industry; and (3) expedites technology transfers. The Centers accomplish these objectives by mobilizing the diverse resources of our nation's higher education system as well as the resources of Federal, state, and local agencies. Various private organizations also contribute funds to the program.

The Centers identify specific, unique economic development needs within their respective states, and work to meet those needs through various forms of technical assistance and applied research. A Center's geographic service area often encompasses a large portion of the state or the entire state. In my district, Western Carolina University's EDA University Center helped organize the Mountain Commercial Lending Consortium--an organization comprised of individual banks which pledged a total of $1 million to make loans to small businesses that cannot satisfy conventional underwriting.

Federal funding for the EDA University Center program has not been extensive. The total funding requested for FY 1994 is $10.58 million, $150,000 per center and an additional $500,000 to institute a quality evaluation program.

Please give me your thoughts on the program's accomplishments and how this increased funding could augment the EDA University Center program.

ANSWER:

EDA believes that many University Centers are making substantial contributions to local economic development. However, the FY 1994 budget request for the University Center program is $7.57 million, not $10.48 million. The difference of $2.91 million is targeted for regular technical assistance.

EDA is proposing holding an open competition for University Center funding during FY 1994. All institutions interested in participating in the University Center program would be required to compete for the available funding. Under such a competition, the funding levels would very likely change.

QUESTIONS FOR THE RECORD FROM CONGRESSMAN ROGERS

Cuts in Public Works Funding

QUESTION:

You requested an additional $49 million in the emergency stimulus package for Title I Public Works funding for infrastructure projects.

However, the President's FY 1994 budget cuts this important program by $12.1 million, over 8%.

- What is your justification for cutting this program which benefits the entire country, while requesting an additional $33 million for defense conversion?
- Will applicants receiving assistance under the defense conversion program also be eligible for this Title I Public Works funding?

ANSWER:

The difference between the FY 1994 Public Works request of $135.385 million and the FY 1993 initially enacted appropriation of $147.435 is $12.050 million or 8 percent. However, the difference between the FY 1994 request and the FY 1993 operating level of $136.585 million is only $1.200 million. The difference between the initial FY 1993 appropriation and the FY 1993 operating level is $10.850 million; this difference resulted from the application of the Secretary's transfer authority as authorized in Section 205 of the FY 1993 Department of Commerce Appropriations Act, P.L. 102-395. The Act authorized the Secretary to transfer up to 5 percent of any appropriation. The FY 1993 difference of $10.850 million represents 5 percent of the $217.0 million appropriated to EDA for grant assistance. Finally, the difference between the FY 1993 operating level of $136.585 million and the FY 1994 request of $135.385 million is $1.200 million, all of which was reallocated to enhance EDA's regional technical assistance capacity.

Communities receiving assistance under the defense conversion program are also eligible for assistance under EDA's regular programs including Title I Public Works funding provided that such communities are designated as eligible for EDA assistance and are experiencing substantial economic distress.

Defense Conversion

QUESTION:

You are requesting $33 million for economic assistance grants under the Title 9 Sudden and Severe Economic

Dislocation program for defense conversion as part of the President's "investment" package in the budget.

Therefore, in order for this Subcommittee to fund this investment, we must raise the spending caps set forth in the 1990 budget aggreement, thus increasing the deficit.

Or this subcommittee must make cuts in other programs--programs which under the President's budget are already taking a cut, such as the Title I Public Works infrastructure grants.

- o How would you advise this Subcommittee to address this problem?
- o What cuts would you suggest to this Subcommittee if the caps are not raised, in order to fund this investment?"

ANSWER:

The Administration intends to work closely with the Congress to ensure that the President's initiatives in the areas of Rebuilding America, Lifelong Learning, Rewarding Work and Health Care are approved in the appropriations process this year. We realize that there will be tremendous pressure on the Appropriations Committee because of the spending caps, however we intend to work with the Congress in every way possible to accommodate substantial initiatives in areas like education, infrastructure, research and development and job training.

QUESTION:

This $33 million will be added to the $130 million currently available to the Department of Defense appropriations for defense conversion.

- o What can these funds be used for?
- o Is there any difference in the allowable usage of the $33 million you are requesting in FY 1994 and the $130 million that has been transferred from DOD?
- o Are additional funds being requested by DOD for defense conversion?
- o What is the criteria that will be used to determine if a community's economic hardship is specifically due to defense reductions?
- o What is the criteria used to determine if a community has been "indirectly" impacted by defense reductions?

ANSWER:

The requested $33 million for defense conversion may be used for adjustment strategy planning (not duplicating Department of Defense Office of Economic Adjustment assistance) and projects that implement such adjustment strategies. Implementation projects may be for public works construction, training (not duplicating Department of Labor assistance), technical assistance, and revolving loan funds. The EDA defense adjustment assistance may be used to respond to base closings, defense contract reductions or defense related Department of Energy facility cutbacks.

In virtually all respects, the funds being requested under the investment proposals for defense conversion will be subject to the same programmatic and administrative requirements that apply to the funds transferred to EDA from DOD.

The Department of Defense is requesting funds to continue the base reuse planning functions of DOD's Office of Economic Adjustment. Although EDA Title IX funds can be used for base reuse planning, EDA will continue its practice of avoiding duplicate funding of activities eligible for OEA assistance. In some circumstances, EDA may fund adjustment planning projects that deal with the balance of a community not covered by an OEA funded base reuse plan.

The criteria for determining if a community is eligible for Title IX SSED defense adjustment assistance is set out in EDA's Federal Register notice of availability of funds. Essentially, the criteria is a measure of the number of jobs lost compared to the size and relative economic health (unemployment rate) of the area's employment base. Lost jobs may be either directly related to a defense impact, e.g., the jobs lost at a closed military base, or indirect job loss impacts, e.g., actual jobs lost in service and support businesses that served a defense installation.

Changes in Eligibility for EDA

QUESTION:

On page 57 of your budget justifications, you are requesting that the prohibition against dedesignating areas as eligible for EDA funds, which has been carried in all appropriations bills since 1970.

You indicate that if this prohibition were lifted, approximately 1,200 economically healthy areas will no longer be eligible for EDA assistance.

- What is the criteria you are using to determine ineligibility? How did you arrive at the number 1,200?

ANSWER:

Redevelopment areas become subject to dedesignation when they fail to meet any of the following criteria:

a) A 24 month unemployment rate which exceeds the national rate for the same period.

b) Median family income less than or equal to $9,958.

c) Per capita employment loss of at least 1.2 percentage points and outmigration between the latest federal census period.

The exact number of areas eligible for dedesignation as of Dec. 31, 1992 is 1,176. This is an actual count of the areas. (Subject to change each quarter)

QUESTION FOR THE RECORD FROM CONGRESSMAN CARR

Trade Adjustment Assistance

QUESTION:

The Administration has eliminated funding for the Trade Adjustment Assistance program. This program aids small firms who have been impacted by imports. I understand that other programs in the Department of Commerce may be able to do the work that the TAA program now provides. What programs in EDA might provide this assistance? In addition, please comment on discussions that would fold TAA into the Economic Adjustment Assistance Program.

ANSWER:

We believe the affected firms can receive the essential assistance they need from programs operated by other Department of Commerce agencies as well as the Small Business Administration. The Department is proposing to eliminate the Trade Adjustment Assistance (TAA) program because it is more cost effective to carry out this activity through existing Commerce programs which provide comparable services. The 12 Trade Adjustment Assistance Centers (TAACs) are too small a network to stand alone and are located near other Commerce facilities which can assume TAAc duties.

Commerce will continue to provide assistance to all manufacturing firms and industries seeking assistance through 30 NIST Manufacturing Centers (MTCs), 100 MBDA Business Development Centers (BDCs), 67 ITA district and branch offices and EDA's Technical Assistance Program. Technical assistance is also available through the Small Business Administration's 750 Small Business Development Centers (SBDCs).

To be eligible for TAA assistance, a firm must submit a petitition for Certification of Eligibilty showing injury. EDA is permitted 60 days to complete processing. Following EDA certification, the firm must submit an acceptable adjustment proposal and an application for technical assistance. Typically this takes 7.5 months. Moreover, providing assistance under TAA can be a time-consuming process.

In addition to providing domestic assistance, the Department has an extensive outreach program to assist manufacturing firms increase export sales. In FY 1992, ITA began providing funding to assist industry-specific organizations establish overseas offices through the Consortia of American Business Programs. Funding for this program is included in ITA's FY 1994 budget request. In FY 1993, ITA began the Market Development Cooperator Program which provides grants to trade associations to develop export promotion programs. ITA is requesting $2.5 million in FY 1994 to continue this program.

Internal EDA discussions have not focused on folding the TAA program into the Economic Adjustment program. These discussions have related only to utilizing the experienced trade adjustment staff to work on adjustments to changing economic situations.

Thursday, April 22, 1993.

TECHNOLOGY ADMINISTRATION AND NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

WITNESSES

MARY C. STACK, ACTING EXECUTIVE DIRECTOR, TECHNOLOGY ADMINISTRATION

RAY KAMMER, ACTING DIRECTOR, NIST

THOMAS A. GARY, BUDGET OFFICER, NIST

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. Price [presiding]. The hearing will come to order. We had earlier been expecting to hear from the Acting Under Secretary of Commerce for Technology, Dr. John Lyons, who was not able to be here, but we are happy to have you, Mr. Kammer, to testify both on behalf of the Technology Administration and the National Institute of Standards and Technology's (NIST) budget submission for fiscal 1994.

The FY 1994 request for the Technology Administration, Salaries and Expenses is $5,425,000, which is an increase of $975,000 over the amount initially appropriated for FY 1993. No additional funds are requested for recapitalization of the National Technical Information Service (NTIS) Revolving Fund. In FY 1993, $8,000,000 was appropriated for that purpose.

We will also consider the fiscal year 1994 budget request for the National Institute of Standards and Technology at the Department of Commerce. The FY 1994 request totals $535,198,000 as follows: $240,988,000 for Scientific and technical research and services (core programs); $232,524,000 for Industrial Technology Services (external programs, such as ATP and Manufacturing Extension); and $61,686,000 for Construction of Research Facilities.

We will insert the justification materials submitted in support of these requests into the record at the point.

[The justification follows:]

Exhibit 1

Department of Commerce
Technology Administration

BUDGET ESTIMATES, FISCAL YEAR 1994
PRESIDENT'S SUBMISSION

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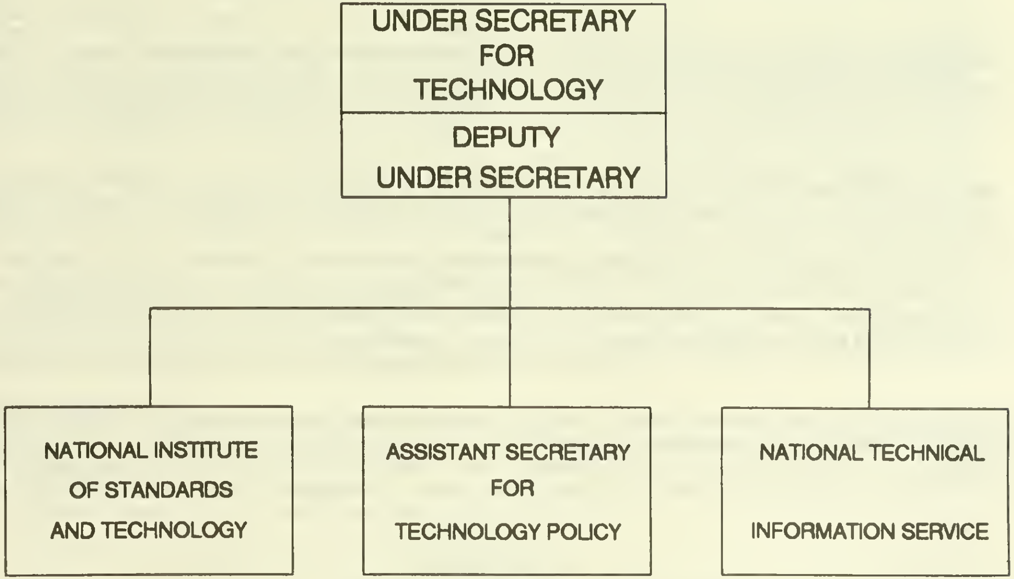
U.S. DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION


UNDER SECRETARY FOR TECHNOLOGY
DEPUTY UNDER SECRETARY
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
ASSISTANT SECRETARY FOR TECHNOLOGY POLICY
NATIONAL TECHNICAL INFORMATION SERVICE

April, 1993

Exhibit 3

DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION
Budget Estimates, Fiscal Year 1994
President's Submission

General Statement

The 1994 request for the Technology Administration (TA) meets the President's vision of "**Investing in technology is America's future.**" TA recognizes that technology is the engine of economic growth. It works with the private sector, industry, and other government organizations, and it provides leadership for implementing President Clinton's and Vice President Gore's vision of Technology for America's Economic Growth: A New Direction to Build Economic Strength and A Vision of Change for America. Both of these documents were published in February, 1993.

TA was established by the Congress in 1989 under Public Law 100-519 in recognition of the critical importance of technology to the nation's long-term industrial competitiveness and economic strength. TA serves as the Government's principal focal point for defining Federal policy on technology issues and for effectively coordinating these policies in order to enhance U.S. industrial competitiveness in both domestic and global markets. It is the principal organization within the Federal Government which develops and promotes Federal technology policies and programs to increase U.S. commercial and industrial innovation, productivity, manufacturing, and economic growth. TA stimulates private sector incentives to help firms to develop and profit from technology innovation; supports private sector productivity and improvement efforts; fosters better quality in U.S. manufacturing; and improves the financing strategies, transfer, and commercialization of new technologies. The broad-ranging goals of TA are accomplished through the executive direction and policy guidance provided by the Under Secretary for Technology and the Assistant Secretary for Technology Policy, and management oversight of the National Institute of Standards and Technology (NIST), and the National Technical Information Service (NTIS).

The 1994 budget request for TA reflects the Administration's efforts to invest in technology, thereby investing in America's future. The new direction envisioned by the Administration foresees an America with: "**a growing economy with more high-skill, high-wage jobs for American workers; a cleaner environment where energy efficiency increases profits and reduces pollution; a stronger, more competitive private sector able to maintain U.S. leadership in critical world markets; an education system where every student is challenged; and an inspired scientific and technological research community focused on ensuring not just our national security but our very quality of life.**" TA can play a crucial role in moving America in this new direction and in enhancing U.S. industrial competitiveness and leadership in critical world markets.

This request for 1994 will enable TA to accomplish several critical objectives. For example, with the additional resources for 1994, TA will be better able to implement innovative policies and programs which translate the Administration's technology vision into policy and program accomplishments. In particular, these efforts will emphasize stimulating economic growth in small and medium size businesses through such actions as enhancing the development of Strategic Partnerships with the private sector and promoting effective proprietary technologies; increasing the focus on expanding technology financing and commercialization initiatives; developing policy options for increasing the availability of long-term capital investment strategies for technology; and other similar activities in support of the Administration's vision of technology as a means to stimulate and sustain U.S. economic growth.

In addition, TA will be able to further promote government-industry-academic partnerships for the creation and utilization of technology among the private sector, universities, and the Federal laboratory communities. In particular, emphasis will be placed on coordinating and sponsoring follow on incentives and activities resulting from the highly successful series of National Technology Initiative conferences which were led by TA and included the Departments of Energy and Transportation, NASA, and EPA in 1992 and 1993.

The 1994 request also includes resources to enable TA to develop a U.S. - Japan Manufacturing Technology Fellowship (MTF) Program. This program will provide American manufacturing engineers the opportunity to obtain work experience in Japanese "centers of excellence" -- their industrial firms. This innovative program has generated an overwhelming response and interest from U.S. industry. More significantly, in recent correspondence from the Japanese Trade Minister to Secretary Brown (cable dated: January 25, 1993) he indicated:

> "-- One such area in which I would like to work closely with you is the Manufacturing Technology Fellowship Program. I am encouraged that solid preparation is being made by officials of both governments. I believe, with proper implementation, this program will be fruitful in bridging our two nations."

In summary, the 1994 resource request for TA will enable the organization to sustain its critical leadership role for technology policy and program development across the Federal Government and the private sector.

Goals of the Program

The 1994 request for TA supports the Administration's technology vision for America, as well as TA's identified goals in its "Strategic View". These goals include:

- Strengthen America's industrial competitiveness, leading to the creation of jobs.
- Build U.S. economic strength and spur American economic growth.
- Foster a private sector business environment where technical innovation will flourish and where business investment will be attracted to new ideas.

- Serve as the focal point for coordinating and managing technology policy and programs across the Government.
- Promote government-industry partnerships for the creation and utilization of technologies among the private sector, universities, and Federal laboratory communities.
- Translate technology into timely, cost competitive, high quality manufacturing products.
- Work with the Department of Labor and Education to foster a quality workforce that is educated, trained, and flexible in adapting to technological and competitive change.
- Promote a financial environment that is conducive to longer-term capital investments in technology.
- Establish an efficient technological infrastructure, especially in the transfer of information.
- Promote a legal and regulatory environment that provides stability for innovation and overcomes barriers to private investments in R&D and domestic production.
- Improve U.S. access to, and use of, foreign commercial technology.
- Invest in generic technology developments such as those accomplished in the Advanced Technology Program.

Summary of Proposed Increases

For 1994, TA is requesting $500,000 to implement the Administration's vision of technology as the key to America's future economic growth and strength. TA provides leadership in achieving the goals of the U.S. Government's technology program by developing and fostering technology policy that encourages the commercialization of R&D and promotes an internationally competitive manufacturing sector in our nation. TA achieves these goals through: promoting government/industry partnerships to create and use technologies; identifying and advocating policy options to increase the availability of longer term capital for technology investments; removing barriers and creating incentives to improve the U.S. manufacturing base; and leadership on the Federal Coordinating Council on Science, Engineering and Technology (FCCSET) and the Interagency Committee on Federal Technology Transfer. The additional resources will foster improvements in each of these activities.

In addition, $500,000 in funding is being requested to support a U.S.-Japan Manufacturing Technology Fellowship (MTF) Program. This innovative program will enable approximately 60 U.S. business men and women manufacturing engineers to have the unique opportunity to work in a Japanese industrial firm for up to one year and to absorb Japanese manufacturing techniques, including such things as Total Quality Control (TQC), Just-in-Time (JIT), and Kanban. These skills, in turn, will be transported back to our U.S. manufacturing centers which will ultimately stimulate a change in business attitude and promote greater flexibility within our U.S. business culture.

Summary of Performance and Resources

Under the effective leadership and policy guidance of the Under Secretary for Technology and the Assistant Secretary for Technology Policy, in concert with the Directors of NIST and NTIS, the Technology Administration will achieve the following accomplishments during the 1994 budget year.

- Performance:

o Sponsor NTI follow-on events and policy roundtable discussions designed to encourage private sector business to increase their participation in cooperative activities with the Federal laboratories.

o Work with the business community to identify barriers to developing effective technology financing and commercialization policies, strategies, and programs.

o Develop a comprehensive, current, and readily accessible central directory of Federal agency transfer programs.

o Conduct analyses designed specifically to identify options to strengthen potential beneficial impacts of tax and other economic policies on U.S. technology financing, development, transfer, and commercialization.

o Foster the development of multi-business Strategic Partnerships and maintain a comprehensive and current database on companies, research, and industrial organizations requesting participation in these business partnerships.

o Implement the U.S. - Japan MTF Program whereby approximately 60 U.S. manufacturing engineers will be detailed to respective Japanese manufacturing firms for one year.

o Foster international technology relationships through Intelligent Manufacturing Systems (IMS) activities, Science & Technology negotiations, and sponsorship of additional technology financing and commercialization seminars in both the Newly Independent States of the former Soviet Union and Eastern Europe.

- Emphasize benefits to U.S. businesses of NIST's Advanced Technology, Manufacturing Extension Partnership, and Malcolm Baldrige Programs as well as NTIS' enhancements to information dissemination and customer service.

- Resources:

To support effectively the Administration's technology mission in pursuit of American economic growth, TA is requesting an additional $1.0 million in new budget authority for 1994. These critical resources will enable TA to provide effective leadership and serve as the focal point for technology policy and program development and technology related issues all across the Federal government. They will enable TA to be a key player in the nation's critical efforts to foster, stimulate, and sustain the long-term economic growth required to create high-quality jobs and protect our environment.

Exhibit 3

Department of Commerce
Technology Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS

(Dollar amounts in thousands)

	Positions	Budget Authority	FTE	Direct Obligations
Amount available for FY 1993 as shown in 1994 President's Budget	43	$4,650	41	$4,650
less(or plus):Dec. 17, 1992 Proposed Transfers (allowed by P.L. 102-395)	...	(14)	...	(14)
Amount Currently Available, 1993	43	4,636	41	4,636
less (or plus) transfers per P.L. 102-395 subsequently implemented		(186)	...	(186)
Appropriation, 1993	43	4,450	41	4,450
less: Obligations from prior years	...	...	...	...
plus: 1994 adjustments to base	...	(25)	2	(25)
less: Prior year recoveries	...	...	...	...
1994 Base	43	4,425	43	4,425
plus: 1994 program changes	0	1,000	0	1,000
1994 Estimate	43	5,425	43	5,425

Comparison by activity/subactivity:		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Under Secretary for Technology											
Direct obligations	Pos./BA	43	$4,401	41	$4,636	43	$4,425	43	$5,425	0	$1,000
	FTE/Obl.	43	4,401	41	4,636	43	4,425	43	5,425	0	1,000
Adjustments for Obligations											
Recoveries		0	0	0	0	0	0	0	0	0	0
Unobligated balance, start of year		0	0	0	0	0	0	0	0	0	0
Unobligated balance, transferred		0	0	0	0	0	0	0	0	0	0
Unobligated balance, end of year		0	0	0	0	0	0	0	0	0	0
Unobligated balance, expiring		0	199	0	0	0	0	0	0	0	0
Financing from transfers:											
Transfers from other accounts		0	0	0	(186)	0	0	0	0	0	0
Transfers to other accounts		0	0	0	0	0	0	0	0	0	0
Appropriation		43	4,600	41	4,450	43	4,425	43	5,425	0	1,000

Exhibit 7

Department of Commerce
Technology Administration
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Estimate Amount	1993 President's Budget Amount	1994 Base Amount	1994 Estimate Amount	Increase/ (Decrease) Amount
Total Obligations:	$4,805	$5,504	$5,204	$5,850	$646
Offsetting collections from:					
Federal funds	(404)	(868)	(779)	(425)	354
Trust funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries:	0	0	0	0	0
Unobligated balance, start of year:	0	0	0	0	0
Unobligated balence transferred:	0	0	0	0	0
Unobligated balance, end of year:	0	0	0	0	0
Unobligated balance expiring:	199	0	0	0	0
Budget Authority:	4,600	4,636	4,425	5,425	1,000
Financing:					
Transfer from other accounts	0	-186	0	0	0
Transfer to other accounts	0	0	0	0	0
Appropriation:	4,600	4,450	4,425	5,425	1,000

Exhibit 8

Department of Commerce
Technology Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Other Changes:		
FTE Reestimate	2	0
FY 1993 pay raise	0	17
Within-grade step increases	0	36
Civil Service Retirement System (CSRS)	0	(14)
Federal Employees' Retirement System (FERS)	0	26
Thrift Savings Plan (TSP)	0	4
Federal Insurance Contributions Act (FICA) - OASDI	0	8
Health insurance	0	10
Travel: Per Diem	0	1
Rental payments to GSA	0	12
Communications, utilities & misc. charges:	0	5
Printing and reproduction	0	2
Other Services:		
Working Capital Fund	0	(133)
Supplies and materials	0	1
Total, adjustments to base	2	(25)

Exhibit 9

Department of Commerce
Technology Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

		FTE	Amount
FTE Reestimate- Technology Administration requires an adjustment of 2 FTEs in 1994 to support base program activity. No funds are associated with the adjustment.		2	0
Pay Raises:			
Full-year cost of 1993 general pay increase and related costs		0	17
Effective January 1, 1993 Federal employees received a 3.7% pay increase.			
Total cost in 1994 of 1993 pay increase	68,000		
Less amount funded in 1993	(51,000)		
Less amount absorbed in 1993	0		
Amount requested in 1994 to provide full year cost of 1993 pay increase	17,000		
Payment to Working Capital Fund	0		
Total, adjustment for 1993 pay increase	17,000		

Within-grade step increases	0	36

An increase of $36,000 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases including merit pay increases which will be earned in 1994.

Estimated number of within-grade step increases	29
Step increases not earned due to turnover (13.6%)	4
Average step above step 1 per separation	3
Average cost per within-grade step increase	1,796
Gross cost of scheduled step increases($1,796 x 29)	52,084
Less savings due to separations(1,796 x 4 x 3)	(21,552)
Subtotal, personnel compensation	30,532
Benefits	5,496
Total adjustment-to-base	36,028

Civil Service Retirement System (CSRS)	0	(14)

The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 54.6% in 1993 to 45.9% in 1994. Contributions rates will remain the same.

Payroll subject to retirement ($2,375,000)	
Cost of CSRS contributions in FY 1994 ($2,375,000 x .459 x .07)	76,309
Cost of CSRS contributions in FY 1993 ($2,375,000 x .546 x .07)	90,773
Total adjustment-to-base	(14,464)

Federal Employees Retirement System (FERS)	0	26

The number of employees covered by the Federal Employees Retirement System (FERS) continues to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 45.4% in 1993 to 54.1% in 1994.

Payroll subject to retirement ($2,375,000)	
Basic benefit cost in FY 1994 ($2,375,000 x .541 x .129)	165,749
Basic benefit cost in FY 1993 ($2,375,000 x .454 x .130)	140,173
Total adjustment-to-base	25,576

Thrift Savings Plan (TSP) 0 4

The cost of agency contributions to the Thrift Savings Plan (TSP) will also rise as FERS participation increases. The contribution rate is expected to remain 2 percent.

Thrift plan cost in FY 1994 ($2,375,000 x .541 x .02)	25,698
Thrift plan cost in FY 1993 ($2,375,000 x .454 x .02)	21,565
Total adjustment-to-base	4,133

Federal Insurance Contributions Act (FICA) 0 8

As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in 1993 to $60,150 in 1994. The OASDI tax rate will remain 6.2% in 1994. The OASDI tax will remain 6.2% in 1994.

FERS payroll subject to FICA tax in 1994 ($2,375,000 x .541 x .786 x .062)	62,615
FERS payroll subject to FICA tax in 1993 ($2,375,000 x .454 x .808 x .062)	54,016
Total OASDI increase (FY 1993-FY 1994)	8,599
Total adjustment-to-base	8417

Health Insurance Premium 0 10

Effective January, 1992 the Technology Administration's contribution to the Federal employees' health insurance premiums increased by 7.74%. Applied against the 1993 estimate of $135,000, the additional amount required is $10,449.

Travel: Per diem 0 1

Effective January, 1992 the General Services Administration raised per diem rates. This increase results in a 3.0% increase to the Technology Administration. This percentage was applied to the FY 1993 estimate of $35,000 to arrive at an increase of $1,365

Rental payments to GSA 0 12

GSA rates are projected to increase 3.0% in 1994 which results in an increase of $12,474.

Communications, utilities & miscellaneous charges: 0 5

The Washington Interagency Telecommunications System (WITS) telephone conversion was installed in the Department, converting the Centex Switch to GSA/WITS Switch. The estimated increase in operating cost is $5,000 due to GSA imposed line charges in the Hoover Building.

GPO Printing 0 2

GPO has provided an estimated rate increase of 3.0%. The cost of printing is expected to increase by $2,100.

Other services: (WCF) 0 (133)

A decrease $133,000 was required for the Departmental Working Capital Fund due to the redistribution of the cost of OGC operations.

Supplies and materials 0 1

Based on the GNP deflator of 2.4%, the cost of supplies and materials is expected to increase by $820 from the 1993 estimate.

Exhibit 10

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Under Secretary for Technology
Subactivity: Under Secretary for Technology

Line Item	1992 Actual FTE	1992 Actual Amount	1993 President's Budget FTE	1993 President's Budget Amount	1994 Base FTE	1994 Base Amount	1994 Estimate FTE	1994 Estimate Amount	Increase/ (Decrease) FTE	Increase/ (Decrease) Amount
Under Secretary for Technology	43	4,401	41	$4,636	43	$4,425	43	$5,425	...	$1,000
Total	43	4,401	41	4,636	43	4,425	43	5,425	...	1,000

Exhibit 12

Department of Commerce
Technology Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Under Secretary for Technology
Subactivity: Under Secretary for Technology

Goal Statement

The mission of TA is to help U.S. businesses to become more competitive on the domestic and international markets. The broad-ranging goal of TA is to foster the development and implementation of Federal technology policies and programs which will enable U.S. businesses to increase significantly their competitiveness in both domestic and world markets. This is accomplished through executive direction and policy guidance provided by the Under Secretary for Technology and the Assistant Secretary for Technology Policy, and operations management of the Directors of NIST and the NTIS.

TA is in a very strong position to implement the Administration's vision of technology for America's future growth through its "Strategic View." Goals specified in TA's "Strategic View", and the Administration's strategic guidance, include:

- Strengthen America's industrial competitiveness and create jobs.
- Build U.S. economic strength and spur American economic growth.
- Foster a private sector business environment where technical innovation will flourish and where business investment will be attracted to new ideas.
- Promote NIST programs which emphasize technology innovation for businesses, such as the Manufacturing Extension Program, the Advanced Technology Program, and the Cooperative Research and Development Agreements (CRADA) Program.
- Serve as the focal point for coordinating, implementing, and managing technology policy and programs across the government.
- Promote government-industry partnerships for the creation and utilization of technologies among the private sector, universities, and Federal laboratory communities.

- o Translate technology into timely, cost competitive, high quality manufacturing products.
- o Work with the Department of Labor and Education to foster a quality workforce that is educated, trained, and flexible in adapting to technological and competitive change.
- o Promote a financial environment that is conducive to longer-term capital investment in technology.
- o Establish an efficient technological infrastructure, especially in the transfer of information.
- o Promote a legal and regulatory environment that provides stability for innovation and does not contain unnecessary barriers to private investments in R&D and domestic production.
- o Improve U.S. access to, and use of, foreign commercial technology.
- o Invest in generic technology developments such as those accomplished in the Advanced Technology Program.

Proposed Legislation

Section 1255 of the Omnibus Budget Reconciliation Act of 1981, P.L. No. 97-35, requires that TA obtain an authorization of its annual appropriation. Appropriations were authorized for fiscal years 1992-1993. Legislation authorizing appropriations for continuation of the programs and activities of TA will be proposed for FY 1994 and FY 1995.

BASE PROGRAM

Explanation and Justification

TA was established by Public Law 100-519 in recognition of the critical importance of technology to the nation's long-term industrial competitiveness and economic strength in the global marketplace. Primary aims are to enhance the effectiveness of Federal technology policies and programs for U.S. business in its effort to finance and commercialize technologies and strengthen U.S. manufacturing bases. Its programs are designed to stimulate private sector cooperation, to support private sector productivity improvement efforts, to foster better quality in U.S. manufacturing, and to improve the financing, development, transfer, and commercialization of technology. TA is the nation's focal point for the development and coordination of policies and programs to facilitate the generation and commercial application of existing and emerging technologies. It integrates and manages numerous Department of Commerce technology functions conducted by the Department's various components. The Under Secretary for Technology, in concert with the Assistant Secretary for Technology Policy and the Directors of NIST and NTIS, performs or oversees the following technology programs and activities:

- Promote the development of effective technology policies and programs which encourages private sector investment and spur economic growth.

- Promote joint efforts with the private sector, State and local governments, and academia to encourage the long-term financing, development, transfer, and commercialization of U.S. technology.

- Promote industrial technology and innovation and reduce barriers to commercialization of new ideas and technologies.

- Facilitate industry and Government efforts to improve the quality of American products and services.

- Assist businesses in their efforts to invest in technology, build economic strength, spur economic growth, and create meaningful jobs.

- Keep the Secretary of Commerce and other senior level management officials informed on ways to enhance U.S. technological competitiveness in both domestic and international markets.

- Consult and collaborate with U.S. academic and business communities to identify priority technologies and analyze foreign competitors' progress in technology innovations, their financing, and their commercialization.

- Represent U.S. commercial interests in international science and technology agreements and participate actively in technology innovations, their financing, and their commercialization.

- Provide policy direction and leadership to the Federal Coordinating Council on Science, Engineering, and Technology (FCCSET) to coordinate the R&D program of all Federal agencies.

- Provide policy support to the President's Council on Competitiveness and the President's Council of Advisors on Science and Technology.

- Oversee the management of the Department's Clearinghouse on State and Local Competitiveness Initiatives Program to provide: (1) a repository of useful technical information on what is being done at the local level; (2) a basis for networking by Federal, State and local policymakers; and (3) analyses of relevant technology policy issues.

- Enhance the U.S. competitiveness posture in international markets through NIST's research measurement- related technical service, leverage of commercially important technologies, and enhancements to the U.S. scientific and technology base.

- Oversee the Federal Technology Management Program and related initiatives which promote effectively the commercialization of Federally-funded technology and research linkages among Federal laboratories, U.S. businesses, State and local governments, and academia.

- Administer the Japan Technology Program which monitors Japanese technical activities and innovations, acquires and translates relevant materials not otherwise available to the U.S. business community, and publishes a bi-monthly newsletter that has a circulation of more than 2,500.

- Manage the National Medal of Technology Award Program which is the highest award the President can bestow upon American citizens and/or companies for their contribution to technological innovation and commercialization.

- Oversee the Malcolm Baldrige Quality Awards Program for outstanding private sector quality management.

- Work with the U.S. business community to address the factors that determine its willingness and ability to adopt, justify, and effectively use advanced manufacturing technologies.

- Emphasize the value of adopting improved quality management techniques to U.S. firms' competitiveness and global economic strength.

The specific programmatic initiatives planned for FY 1994 include the following:

- Develop effective management of technology policy emphasizing effective partnerships between Federal and State governments, industry, and academia.

- Implement a joint U.S. - Japan MTF program through which selected American business men and women can gain experience by working in Japanese industrial firms.

- Sponsor NTI follow-on activities and events with a particular emphasis on developing and implementing long-term economic growth and technology financing, transfer, and commercialization policies and programs.

- Foster the further development of Strategic Partnerships whereby private sector, multi-business firms form a consortia or team that use a systems management approach to develop new, large-scale enabling technologies. Large-scale enabling technologies are those that are too complex and costly for a single firm to develop on its own.

- Enhance advanced manufacturing programs which focus on the advanced manufacturing needs of small and medium-size businesses.

- Monitor and analyze any new proposed legislation which might impact generally on technology policy issues and programs and on the specific programs of TA.

__Measures of Performance__

Under the effective executive direction and policy guidance provided by the Under Secretary and the Assistant Secretary for Technology Policy, many significant accomplishments have been achieved. These include the following:

- Initiated the U.S. - Japan MTF program to place American personnel in Japanese manufacturing firms.

- Sponsored, in cooperation with NASA and the Departments of Energy and Transportation, the highly successful NTI Program throughout the nation. The results of these national sessions were extremely productive for private sector, small and medium-size businesses, particularly in learning the benefits of Federal technology and financing opportunities for these firms.

- Provided intergovernmental leadership in the FCCSET and policy support to the President's Council on Competitiveness and the Council of Advisors on Science and Technology.

- Enhanced awareness of the Presidential National Medal of Technology Award Program for recognition of extraordinary achievements in technology. This included expanded support by a non-profit education Foundation to support the Medal program and its visibility in the private and public sectors.

- Fostered the continued development of Strategic Partnerships which are multi-industry teams of firms formed to create and commercialize proprietary technologies in particular large-scale enabling technologies, using a comprehensive systems management approach. Large-scale enabling technologies are technologies which are too complex and costly for a single firm to create and develop.

- Oversaw the annual award process for the Malcolm Baldrige National Quality Award to honor companies for their achievements in outstanding total quality management.

- Initiated a new intellectual property rights (IPR) annex to international science and technology agreements and secured its acceptance by foreign governments.

- Participated extensively in the Intelligent Manufacturing Systems (IMS) negotiations. A full scale R&D IMS program is anticipated to begin in 1994.

- Encouraged continued growth in CRADAs, royalties, and patent licensing.

- Expanded the formation of Shared Flexible Computer-Integrated Manufacturing (SFCIM) facilities to help small and medium size businesses improve their manufacturing practices and competitiveness through technological advances.

- Established an Operating Unit Executive Resources Board (OERB) and a Performance Review Board (PRB) for all of TA. These boards provide executive human resources policy and program direction for the entire organization.

- Oversaw the successful expansion of the NIST Manufacturing Technology Centers (MTCs). These transfer leading edge manufacturing technologies and techniques to the private sector and the NIST Advanced Technology Program which help American businesses to develop promising, precognitive, generic technologies.

- Oversaw the refocusing of NTIS in its efforts to significantly expand its customer service through the broader and more efficient dissemination of science and technology information to the private and public sectors.

Exhibit 13

Department of Commerce
Technology Administration
Salaries and Expenses
INCREASE FOR FY 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase/Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount
Under Secretary for Technology	43	$4,425	43	$4,925	---	$500

The request for the Japan Manufacturing Technology Fellowship (MTF) Program includes resources to establish a U.S. - Japan MTF Program to provide American business men and women manufacturing engineers the opportunity to obtain work experience in a Japanese manufacturing enterprise.

The U.S.-Japan MTF Program is designed to enhance the effective communication of manufacturing technology developments and innovations between the U.S. and Japan by providing opportunities for American manufacturing engineers to work in technologically advanced Japanese manufacturing firms. The MTF fellows will have a unique opportunity to absorb Japanese techniques, including TQC, JIT, and Kanban, and to obtain a basic understanding of Japanese business, culture, and society. The U.S.-Japan Science and Technology Agreement of 1988 provides the framework for the establishment of this intergovernmental fellowship program.

The late 1970's and early 1980's were characterized by trade friction between Japan and the U.S. when the U.S. trade deficit with Japan spiraled upwards and Japanese high technology products swamped world markets. The U.S. became acutely aware of the unequal relationship; the transfer of science and technology from the U.S. had benefitted Japan's postwar economic success and its industrial and economic base. Conversely, the transfer of thousands of Japanese researchers to the U.S. to earn advanced degrees in American universities, predominantly in science and technology, and to work in U.S. laboratories (after which licensing agreements transferring technology from U.S. companies to Japanese companies were permitted) facilitated Japanese predominance in scientific and technological development. This one-sided relationship of access to science and technology caused grave concern in the U.S. It was therefore necessary to place a priority on monitoring Japanese scientific and technical information, and essential that U.S. researchers and scientists have reciprocal access to Japanese government-supported and sponsored research and development initiatives.

The recognition that shared contributions and equitable benefits were imperative to a continuing bilateral U.S.-Japan relationship resulted in the U.S.-Japan S&T Agreement of 1988. This Agreement includes provisions for collaboration in large-scale projects and major R&D initiatives. In addition, the Agreement continued to build upon the Japanese Technical Literature Act of 1986, whose enactment was spurred by the recognition of Japan's skill in acquiring and utilizing foreign information to develop commercially applicable technologies. The Japan Technology Program carries out the mandates of the Act, and it implements the S&T Agreement for the Department of Commerce.

The primary objective of this program will be to work closely with the U.S. business community, industry, and other government agencies to place approximately 60 American manufacturing engineers to work in Japanese manufacturing firms for up to one year. Several months of intensive language, social, and cultural training will be provided to the MTF fellows and at the end of the fellowship, they will return to their respective sponsoring business as specified in the conditions of acceptance for the program.

TA will provide leadership and assistance to partner agencies who also have interests in the MTF Program. It will manage and obtain basic language training for the program participants. It also will serve as the primary focal point for making available and providing educational and other materials for selected and potential fellows and their companies. Information will be collected, organized, and made available on Japanese labor union organizational structures, Japanese R&D manufacturing systems, and most importantly on the significant potential benefits that can be gained from establishing inter-personal networks and professional connections with the Japanese industrial business community.

The participating U.S. businesses will pay the fellow's salary and benefits and the respective Japanese company defrays housing, and appropriate living and transportation expenses. While yet to be fully explored, there is some possibility that Japanese funding sources could be used to help pay for the fellowship costs of individuals from smaller companies. In these instances, TA would administer the monies.

The U.S.-Japan MTF Program will result in significant important benefits in keeping with the Administration's vision of technology for America's future. It will:

- o Strengthen America's industrial competitiveness and ultimately lead to the creation of jobs, while simultaneously establishing invaluable human and international professional networks.

- o Establish a genuine two-way, long-term flow of scientific and technical information between the U.S. and Japan, particularly among junior-level engineers and executives.
- o Stimulate researchers and technical personnel from the U.S. to work in Japan in order to create the bonds of friendship and frequent interaction that are essential to sustain the mutual sharing of manufacturing technology information and technology development.
- o Complement and reinforce existing TA programs in the areas of literature, special reports, R&D collaboration, business counseling, and educational activities.
- o Allow U.S. businesses access to Japan's industrial facilities, which balances the historical access Japan has had to U.S. in universities and Federal national laboratories.

In summary, the most promising way to gain access to Japanese technology is through genuine cooperation with Japanese business firms. The U.S.- Japan MTF Program offers U.S. private enterprise this opportunity. Such an investment by the U.S. government in collaboration with industry will enhance significantly the U.S. industrial strength and stimulate American economic growth. In this regard, the U.S. Government, with TA as the focal point, needs to recognize that the U.S. - Japan MTF Program can help American manufacturers experience Japan's "strategic planning for quality and quality improvement programs, through a commitment to excellence in manufacturing and services." Such U.S. industry involvement is "more and more essential to the well-being of our nation's economy and our ability to compete effectively in the global marketplace."

Outyear Estimates
(Dollar amounts in thousands)

Costs and Benefits:	1994	1995	1996	1997	1998
Direct Obligations:					
Capitalized	0	0	0	0	0
Uncapitalized	500	500	500	500	500
Total	500	500	500	500	500
Budget Authority	500	500	500	500	500
Outlays	430	500	500	500	500
FTE	---	---	---	---	---

Exhibit 16

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Under Secretary for Technology
Subactivity: Under Secretary for Technology
Program Change: Japan Manufacturing Technology Fellowship

Object Class		1994 Increase
11	Personnel compensation	
11.1	Full-time permanent	$0
11.9	**Total personnel compensation**	0
12.1	Civilian personnel benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	30
22	Transportation of things	2
23.1	Rental payments to GSA	0
23.3	Communications, utilities and miscellaneous charges	10
24	Printing and reproduction	12
25	Other services	394
26	Supplies and materials	27
31	Equipment	25
99	**Total obligations**	500

Exhibit 13

Department of Commerce
Technology Administration
Salaries and Expenses
INCREASE FOR FY 1994
(Dollar amounts in thousands)

	1994 Base		1994 Estimate		Increase/Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount
Under Secretary for Technology	43	$4,425	43	$4,925	---	$500

With the additional resources for 1994, the Technology Administration will be better able to implement innovative technology policy and programs. These efforts will emphasize stimulating economic growth in small and medium size businesses, such as:

o Enhancement of TA's role in facilitating the establishment of multi-business Strategic Partnerships with the private sector. These partnerships will enable U.S. businesses to develop, manufacture, and commercialize new technology processes and products in order to maintain U.S. technological competitiveness. Strategic Partnerships consist of businesses representing research and development firms, industrial suppliers, manufacturers, and multiple users. These consortia develop new large-scale enabling technologies which are technologies too complex and too costly for a single firm to develop and which have more potential applications than a single firm or business can readily exploit.

o Increased focus on developing innovative technology financing and commercialization policies and programs. It includes enhanced effectiveness of inter-agency Federal technology transfer policy and programs, so that products are taken to the market quickly, demonstrate high quality, and are cost competitive. Activities in this area encompass identifying and overcoming legal challenges and public mandates to facilitate transfer of Federally funded research for commercialization to private industry.

o Promotion of government-industry-academic partnerships for the creation and utilization of technologies among the private sector, universities, and Federal laboratory communities. Emphasis will be placed on coordinating and sponsoring follow-on activities stemming from the highly successful National Technology Initiative conferences held in 1992 and 1993.

- Policy initiatives for manufacturing business strategies and advanced manufacturing practices. This includes expansion of on-going cooperative activities between the Departments of Commerce and Labor in order to create jobs and stimulate U.S. economic growth. In addition, TA will conduct expanded analyses of manufacturing programs such as the SFCIM program to determine their benefit for small and medium size businesses.

- Focus on increasing the visibility for the Administration in the awarding of the National Medal for Technology. This will include promotion of a plan for school aged children -- thus highlighting the President's emphasis on life-long education.

- Expansion of the Intelligent Manufacturing Systems (IMS) program involving broad-ranging international cooperative agreements. The globalization of manufacturing has resulted in a need for international cooperation in research and development in advanced manufacturing. The IMS program is one of the key forums in which this process is taking place and this international collaboration is in the long-term best interest of U.S. industry in the global marketplace.

- Enhancement of international technology policy activities including the negotiation of additional international S&T Agreements. As mandated by the 1988 Omnibus Trade and Competitiveness Act and Executive Order 12591, TA negotiates all such agreements on behalf of the Department of Commerce to provide for the proper protection of associated intellectual property rights (IPR).

In summary, additional resources devoted to these technology-focused programs and activities will result in (1) strengthening the Department of Commerce's ability to fulfill the increasingly important Federal leadership role in promoting the international competitiveness of U.S. businesses; (2) improving the coordination and effectiveness of Federal agency technology financing, transfer and commercialization programs and increasing industry awareness of those programs; and (3) directly supporting the Administration's technology vision for America.

Outyear Estimates
(Dollar amounts in thousands)

	1994	1995	1996	1997	1998
Costs and Benefits:					
Direct Obligations:					
Capitalized	0	0	0	0	0
Uncapitalized	500	500	500	500	500
Total	500	500	500	500	500
Budget Authority	500	500	500	500	500
Outlays	430	500	500	500	500
FTE	---	---	---	---	---

Exhibit 16

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Under Secretary for Technology
Subactivity: Under Secretary for Technology
Program Change: Technology, America's Vision for the Future

Object Class	1994 Increase
11 Personnel compensation	
11.1 Full-time permanent	$282
11.9 Total personnel compensation	282
12.1 Civilian personnel benefits	68
13 Benefits for former personnel	0
21 Travel and transportation of persons	18
22 Transportation of things	2
23.1 Rental payments to GSA	0
23.3 Communications, utilities and miscellaneous charges	39
24 Printing and reproduction	13
25 Other services	46
26 Supplies and materials	16
31 Equipment	16
99 Total obligations	500

Exhibit 16

Department of Commerce
Technology Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 * Estimate	1993 * President's Budget	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	$2,260	$2,380	$2,333	$2,615	$282
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	55	55	55	55	0
11.9	Total personnel compensation	2,315	2,435	2,388	2,670	282
12.1	Civilian personnel benefits	397	420	454	522	68
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	146	147	151	203	52
22	Transportation of things	3	0	0	0	0
23.1	Rental payments to GSA	433	505	517	517	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities and miscellaneous charges	26	35	35	84	49
24	Printing and reproduction	29	35	37	62	25
25	Other services	982	1004	792	1,232	440
26	Supplies and materials	29	35	31	74	43
31	Equipment	41	20	20	61	41
32	Lands and structures	0	0	0	0	0
41	Grants, subsidies, and contributions	0	0	0	0	0

Exhibit 16

Department of Commerce
Technology Administration

Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1992 Estimate	1993 President's Budget	1994 Base	1994 Estimate	Increase/ (Decrease)
Personnel Data					
Full-time equivalent employment:					
Full-time permanent	43	41	43	43	0
Other than full-time permanent	0	0	0	0	0
Total	43	41	43	43	0
Authorized Positions:					
Full-time permanent	43	41	43	43	0
Other than full-time permanent	0	0	0	0	0
Total	43	41	43	43	0

Exhibit 17

Department of Commerce
Technology Administration
Salaries and Expenses

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	$0	$238	$238	$0
	Senior executive service	0	393	393	0
	General schedule	53	1,702	1,984	282
	Scientific & professional (P.L. 80-313)	0	0	0	0
	Subtotal	53	2,333	2,615	282
11.3	Other than full-time permanent				
	General schedule	0	0	0	0
	Wage board	0	0	0	0
	Experts & consultants	0	0	0	0
	Hourly	0	0	0	0
	Subtotal	0	0	0	0
11.5	Other personnel compensation				
	Overtime	0	0	0	0
	SES performance awards	0	22	22	0
	Cash awards	0	14	14	0
	Merit pay awards	0	19	19	0
	Other	0	0	0	0
	Subtotal	0	55	55	0
11.9	Total personnel compensation	53	2,388	2,670	282

12.1	Civilian personnel benefits				
	Civil service retirement	-14	108	108	0
	Federal employees' retirement	26	148	164	16
	Thrift savings plan	4	40	50	10
	Federal Insurance Contribution Act	8	22	35	13
	Health insurance	10	116	130	14
	Life insurance	0	20	25	5
	Employees' Compensation Fund	0	0	0	0
	Other	0	0	10	10
	Subtotal	34	454	522	68
13	Benefits for former personnel				
	Severance pay	0	0	0	0
	Unemployment compensation	0	0	0	0
	Other	0	0	0	0
	Subtotal	0	0	0	0
21	Travel and transportation of persons				
	Common carrier	0	80	108	28
	Mileage	0	5	5	0
	Per diem/actual	1	30	50	20
	Other	0	33	37	4
	Subtotal	1	148	200	52
22	Transportation of things	0	3	3	0
23.1	Rental payments to GSA	12	517	517	0
23.2	Rental payments to others	0	0	0	0

23.3	Communications, utilities and miscellaneous charges				
	Rental of ADP equipment	0	0	18	18
	Rental of office copying equipment	0	12	25	13
	Other equipment rental	0	2	10	8
	Federal telecommunications system	0	7	7	0
	Other telecommunications services	5	12	20	8
	Postal Service by USPS	0	2	4	2
	Other	0	0	0	0
	Subtotal	5	35	84	49
24	Printing and reproduction				
	Publications	0	6	10	4
	Public use forms	0	2	2	0
	Envelopes	0	4	8	4
	Other	2	25	42	17
	Subtotal	2	37	62	25
25	Other services				
	Training:				
	Office of Personnel Management	0	0	5	5
	Other	0	0	12	12
	Maintenance of equipment	0	10	12	2
	ADP Services	0	150	150	0
	Payments to OA, WCF	−133	526	610	84
	Other non-government contracts	0	96	100	
	Other	0	10	343	333
	Subtotal	−133	792	1,232	440

26	Supplies and materials				
	Office supplies	1	15	30	15
	ADP supplies	0	10	35	25
	Other	0	6	9	3
	Subtotal	1	31	74	43
31	Equipment				
	Office machines and other equipment	0	4	15	11
	ADP hardware	0	14	44	30
	Other	0	2	2	0
	Subtotal	0	20	61	41
32	Lands and structures	0	0	0	0
41	Grants, subsidies, and contributions	0	0	0	0
42	Insurance claims and indemnities	0	0	0	0
99	Total Obligations	-25	4,425	5,425	1,000
	Total Budget Authority	(25)	4,425	5,425	1,000

Exhibit 18

Department of Commerce
Technology Administration
Salaries and Expenses
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 1- 1993 Structure
(Dollar amounts in thousands)

Activity /Subactivity	1993 Direct Obligations	Proposed Changes
Under Secretary for Technology	$4,636	There are no proposed changes for the Under Secretary for Technology
Total requirements	4,636	

Exhibit 19

Department of Commerce
Technology Administration
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 2 - 1994 Structure
(Dollar amount in thousands)

Activity/Subactivity	1991	1992	1993	1994
Under Secretary for Technology	$4,200	$4,401	$4,636	$5,425
Total direct obligations	4,200	4,401	4,636	5,425

Exhibit 31

DEPARTMENT OF COMMERCE
Technology Administration

Salaries and Expenses
APPROPRIATION SUMMARY STATEMENT

For necessary expenses of the Technology Administration, $4,450,000. (Department of Commerce Appropriations Act, 1993.)

Exhibit 32

DEPARTMENT OF COMMERCE
Technology Administration

Salaries and Expenses
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

There are no proposed language changes for the Technology Administration for FY 1994.

Exhibit 33

DEPARTMENT OF COMMERCE
Technology Administration

Salaries and Expenses
APPROPRIATION LANGUAGE AND CODE VIOLATIONS

Existing Appropriation and Code Citations for the Technology Administration include the following:

1. **For necessary expenses, as authorized by law, of the Technology Administration.**

   P.L. 100-519
   15 U.S.C. 1516
   15 U.S.C. 3701 et seq., (Chapter 63)
   15 U.S.C. 3704 (d)
   15 U.S.C. 1604
   40 U.S.C. 759 (f)

2. **P.L. 100-519, "The National Institute of Standards and Technology Authorization Act for Fiscal Year 1989" established the Office of the Under Secretary for Technology.**

3. **15 U.S.C. 1516 provides the Department of Commerce with the authority to gather and distribute certain technological statistical information.**

4. **15 U.S.C. 3701 et seq., (Chapter 63) provides the Department of Commerce with the authority relating to studies of technological development in the United States, cooperative technology arrangements, and the transfer of industrial technology from the Federal Government to the private sector.**

5. **15 U.S.C. 3704(d), "The Japanese Technical Literature Act of 1986" provides that the Secretary of Commerce shall establish and, through the NTIS and other Department of Commerce offices, maintain a program to: monitor Japanese technical activities and developments; consult with business, universities, libraries, etc. regarding their needs for Japanese technology and engineering information; acquire and translate selected Japanese technical reports and documents of value to the Federal Government and U.S. businesses and academia; and coordinate with other Federal agencies to identify significant work and avoid duplication of efforts to acquire, translate, index, and disseminate Japanese technical information.**

6. 15 U.S.C. 1604 provides the Department of Commerce with the authority relating to the preparation of reports on user needs for critical technology materials.

7. 40 U.S.C. 759(f) provides the authority to: (1) exercise the functions of the Secretary of Commerce under the provisions in the Federal Information Processing Standards Act which authorize the Secretary to waive compliance with requirements of the standards; (2) issue interpretations concerning the waiver provisions of the standards; and (3) join with the NIST Director in recommending the establishment of uniform Federal automatic data processing standards.

Exhibit 34

DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION

Salaries and Expenses
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	$ 0	$ 85	$ 0
Management and professional services	106	171	571
Special studies and analyses	0	25	0
Management and Support services for research and development	0	0	0
TOTAL	106	281	571

The 1993 estimate for consulting services reflects costs associated with the consultants assigned to the Technology Administration by the new Administration's Transition Team.

1992 actuals for management and professional services reflect contract costs associated with the Japan Technology Program and the ComSci Program. 1993 and 1994 estimates also reflect contract costs associated with these programs. In addition, costs associated with the outside professional services contracted for the U.S.-Japan Manufacturing Technology Fellowship Program are reflected in 1993 and 1994.

The $25,000 special studies estimate is associated with a study conducted in conjunction with the National Academy of Science.

Exhibit 35

Department of Commerce
Technology Administration

Salaries and Expenses
PERIODICALS, PAMPLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	5	5	6	6
Phamplets	0	0	0	0
Audiovisuals	0	0	0	1
Total	5	5	6	7

Exhibit 36

DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION

Salaries and Expenses
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Direct:			
Average ES Grade	ES 2	ES 2	ES 2
Average GS/GM Grade	12.11	12.11	12.11
Average GS/GM Salary	$51,790	$52,385	$53,230
Average Salary of Ungraded Positions	0	0	0

Exhibit 1

DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL INFORMATION SERVICE
Budget Estimates, Fiscal Year 1994
President's Submission

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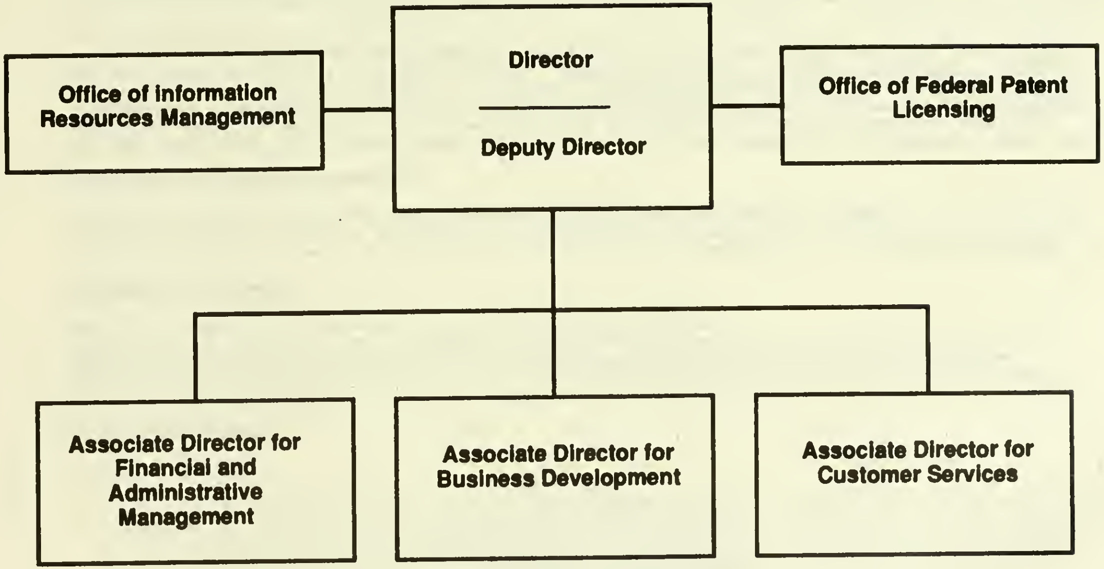
April 1993

Exhibit 2

U.S. DEPARTMENT OF COMMERCE

NATIONAL TECHNICAL INFORMATION SERVICE


Director
Deputy Director
Office of Information Resources Management
Office of Federal Patent Licensing
Associate Director for Financial and Administrative Management
Associate Director for Business Development
Associate Director for Customer Services

NTIS-1

Exhibit 3

DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL INFORMATION SERVICE
Budget Estimates, Fiscal Year 1994
President's Submission

Executive Summary

Goals of the Program:

The National Technical Information Service (NTIS) operates under the provisions of Title 15, U.S. Code 1151-1157, as amended, to collect, process, market and disseminate Government-sponsored and foreign scientific, technical, and business information; license Federally-owned patents and transfer other specialized technologies to enhance the U.S. economy; and assist other agencies with their information programs. The NTIS is an organizational component of the Technology Administration.

Statement of Objectives:

To provide products and services designed to increase the flow of technology into the world marketplace. To serve as the primary source for the public sale of Government-sponsored research and engineering reports, research in progress information, machine-processable data files and computer software.

Summary of Performance and Resources:

The NTIS Information Clearinghouse Program directly promotes the development and application of science and technology, providing channels for the dissemination of specialized information to business, industry, Government, and the public. This program has been financially stabilized with the passage and establishment of the NTIS Revolving Fund, in FY 1993. The program's ongoing costs are funded through the sale of NTIS products and services; not direct appropriations. NTIS has recently undergone a reorganization that will reduce costs, streamline the organization, and make it more efficient and responsive to the needs of NTIS' customers.

The FY 1993 one-time appropriation of $8,000,000 established a Public Enterprise Revolving Fund. This fund provided NTIS with the necessary capital to finance operations within established legal and governmental accounting frameworks, and provides resources to draw upon during times of low cash flow. The Information Products and Services Account was replaced by this fund and the Information Clearinghouse Program is funded by receipts deposited in the fund. Through this program, NTIS plans to obligate $68,000,000 in FY 1994.

Exhibit 3

A summary of the NTIS' budget request for FY 1994-FY 1998 is detailed below:

(Dollar amounts in thousands)

	1994	1995	1996	1997	1998
National Technical Information Service:					
NTIS Revolving Fund........................	0	0	0	0	0
Reimbursement from offsetting collections:					
Information clearinghouse program 1/.	68,000	68,000	68,000	72,000	76,000
Total, NTIS................................	68,000	68,000	68,000	72,000	76,000

1/ NTIS previously recognized collections on other agencies' receivables as budgetary receipts, and remittance of those collections as obligations. New accounting practices recognizes such transactions as "passing through" of funds without budgetary impact. This exhibit reflecte the previous accounting practice and will be revised in the FY 1995 budget. In FY 1994, $26 million of the $68 million in obligations is considered pass-through funding. In FY 1995 $21 million of the $68 million in obligations is considered pass-through funding. In FY 1996, $16 million of the $68 million in obligations is considered pass-through funding.

Exhibit 5

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

No.	Positions	Budget Authority	FTE	Direct Obligations
Amount avail. for FY 1993 as shown in 1994 President's Budget	0	7,800	0	7,800
Amount Currently Available, 1993	0	7,800	0	7,800
less (or plus): trans. per P.L. 102-395 subsequently implemented..	0	200	0	200
Appropriation, 1993 1/	0	8,000	0	8,000
less: Obligations from prior years	0	0	0	0
plus: 1994 adjustments to base....................................	0	(8,000)	0	(8,000)
less: Prior year recoveries.......................................	0	0	0	0
1994 Base	0	0	0	0
plus: 1994 program changes	0	0	0	0
1994 Estimate	0	0	0	0

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Comparison by activity		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Technical Information Service:											
Information clearinghouse	Pos./BA.	0	0	0	7,800	0	0	0	0	0	0
program	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Direct Obligations	Pos./BA.	0	0	0	7,800	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Adjustments to Obligations											
Recoveries		0	0	0	0	0	0	0	0	0	0
Unobligated Balance, start of year		0	0	0	0	0	(14,853)	0	(14,853)	0	0
Unobligated balance transferred		0	0	0	(7,053)	0	0	0	0	0	0
Unobligated balance end of year		0	0	0	14,853	0	14,853	0	14,853	0	0
Unobligated balance lapsing		0	0	0	0	0	0	0	0	0	0
Financing from transfers:											
Transfer from other accounts		0	0	0	0	0	0	0	0	0	0
Transfer to other accounts		0	0	0	200	0	0	0	0	0	0
Appropriation		0	0	0	8,000	0	0	0	0	0	0

1/ This appropriation established the NTIS Revolving Fund that replaced the Information Products and Services Account.

Exhibit 7

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 1/ Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Total Obligations	$34,049	$68,000	$68,000	$68,000	0
Offsetting collections from:					
Federal funds	(7,922)	(9,520)	(9,520)	(9,520)	(0)
Trust funds	0	0	0	0	0
Non-federal sources	(29,350)	(58,480)	(58,480)	(58,480)	(0)
Recoveries	0	0	0	0	0
Unobligated balance, start of year	(3,830)	0	(14,853)	(14,853)	0
Unobligated balance transferred	0	(7,053)	(0)	(0)	0
Unobligated balance, end of year	7,053	14,853	14,853	14,853	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	0	7,800	0	0	0
Financing:					
Transfers from other accounts	0	0	0	0	0
Transfers to other accounts	0	200	0	0	0
Appropriation	0	8,000	0	0	0

1/ This activity was funded in FY 1992 through the Information Products and Services account. The NTIS Public Enterprise Revolving Fund was established in FY 1993 by P.L. 102-395 replacing the Information Products and Services Account in FY 1993.

Exhibit 8

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	FTE	Amount
Adjustment:			
One-time Appropriation	0	0	-$8,000
Total, Adjustments to Base	0	0	-$8,000

Exhibit 9

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands

	FTE	Amount
Adjustment:	0	-$8,000
One-time Appropriation - A one-time appropriation of $8,000,000 was requested in FY 1993. These funds will not be required in FY 1994.		
Total	0	-$8,000

Exhibit 10

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: National Technical Information Service
Subactivity: Information Clearinghouse Program

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Information clearinghouse program 1/	0	0	0	8,000	0	0	0	0	0	0
Total	0	0	0	8,000	0	0	0	0	0	0

1/ A one-time appropriation in FY 1993 established the NTIS Revolving Fund that replaced the Information Products and Services Account.

Exhibit 11

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: National Technical Information Service
Subactivity: Information Clearinghouse Program

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Information clearinghouse program 1/	335	$34,049	346	$68,000	380	$68,000	380	$68,000	0	0
Total	335	$34,049	346	$68,000	380	$68,000	380	$68,000	0	0

1/ This activity was funded in FY 1992 through the Information Products and Services account. The NTIS Public Enterprise Revolving Fund was established in FY 1993 by P.L. 102-395 replacing the Information Products and Services Account in FY 1993.

Exhibit 12

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: National Technical Information Service
Subactivity: Information Clearinghouse Program

Goal Statement

To collect, process, market and disseminate Government-sponsored and foreign scientific, technical, and business information; license Federally-owned patents and transfer other specialized technologies to enhance the U.S. economy; and assist other agencies with their information programs.

Objective

To provide products and services designed to increase the flow of U. S. developed and manufactured technology into the world marketplace. To serve as the primary source for the public sale of Government-sponsored research and engineering reports, research in progress information, machine-processable data files and computer software.

Proposed Legislation

New legislation is being proposed to provide guidance to NTIS with respect to the use and administration of the NTIS Revolving Fund that was established by Title II of the Departments of Commerce, Justice, and State, the Judiciary and Related Agencies Appropriations Act, 1993 (Public Law 102-395).

Base Program

Information Clearinghouse Program -- Operates as a central source for the acquisition and public sale of domestic and foreign Government-funded research, development, and engineering reports and associated business information. The program directly promotes the development and application of science and technology, and provides channels for the dissemination of specialized information to business, industry, Government, and the public. Approximately 70,000 new technical information products are processed annually and made available. Through the acquisition and distribution of Government-produced computer programs and computerized databases, on-line access is provided to bibliographic databases produced by or for Government agencies. Access to summaries describing ongoing Government-funded research projects in the fields of physical sciences, engineering, and life sciences also are available. International agreements for the exchange of scientific and technical information are established, and foreign information is identified,

Exhibit 12

acquired, translated, and disseminated to U.S. industry upon request. Information is available in both print and electronic format.

Explanation and Justification:

This program is funded through the sales of NTIS products and services. NTIS employment has been adjusted by 34 additional positions and FTE in the FY 1994 Base to accommodate the transfer of the Document Imaging and Reproduction Division from the Department's Office of Administrative Operations.

Measures of performance:

Unit Sales Measures

	1992 Actual	1993 Estimate	1994 Estimate
Information Clearinghouse Program: 1/			
Information products catalogued and indexed........	75,611	76,000	78,000
NTIS announcement products, and subscriptions:			
Abstract Newsletters..........................	3,912	4,160	4,500
Government Reports Announcements & Index (GRA&I).	582	550	510
Published searches sold........................	5,369	13,000	13,000
Specialized subscriptions and standing orders....	16,310	16,088	17,000
Copies of documents sold:			
Paperbound demand..............................	345,473	385,000	400,000
Microfiche demand..............................	23,342	25,000	20,000
Selected research in microfiche (SRIM)..........	1,294,901	1,400,000	1,475,000
Computer products sold..........................	12,189	15,713	17,000
Databases offered..............................	13	15	15
Data files offered..............................	1,800	2,000	2,200
Software programs offered........................	2,800	3,000	3,200
Database users..................................	22,000	24,000	25,000
Patent licenses granted..........................	41	30	25
Inventions foreign filed.........................	31	6	6
International agreements.........................	45	50	55
Documents translated.............................	0	4	4

1/ Funded through the Information Products and Services Account (Trust Fund) in FY 1992 and through the NTIS Revolving Fund in FY 1993 and beyond.

Exhibit 12

Performance Measures

	1991 Actual	1992 Actual	1993 Actual	1994 Actual
Quality Measures:				
Number of Customer Complaints (average per week)	260	250	240	230
Order Turnaround Time (average number of days)	6.4	5.5	5.3	5.0
Financial Measures:				
Quick Ratio	1.47	1.57	1.60	1.60
Current Ratio	1.54	1.63	1.65	1.65
Percent change in sales volume (Clearinghouse Products Only)	N/A	3.3%	2.6%	2.6%
Gross Profit Margin (Clearinghouse Products Only)	N/A	32%	35%	35%
Net Profit Margin	9%	8%	10%	10%
Inventory Turnover	N/A	17.37	18.00	18.00
Accounts Payable to Net Sales	.44	.43	.42	.42
Inventory to Working Capital	.13	.10	.10	.10
Accounts Receivable Turnover	9.67	12.78	13.00	13.00

Exhibit 12

The following table compares the equivalent employment, funding, and obligations for FY 1992-1994:

Information Products and Services and the NTIS Revolving Fund
Financing and Position
(Dollar amounts in thousands)

Fund:	FY 1992 Actual 2/ Perm. Pos.	FY 1992 Actual 2/ Amount	FY 1993 Estimate Perm. Pos.	FY 1993 Estimate Amount	FY 1994 Estimate Perm. Pos.	FY 1994 Estimate Amount
National Technical Information Service:						
Information clearinghouse program (sales receipts) 1/......................	386	$37,272	0	$0	0	$0
	(335)	(34,049)	(0)	(0)	(0)	(0)
NTIS revolving fund: 2/						
Appropriation.......................	0	0	0	8,000	0	0
	(0)	(0)	(0)	(0)	(0)	(0)
Information clearinghouse program (sales receipts) 1/.....................	0	0	347	68,000	415	68,000
	(0)	(0)	(346)	(68,000)	(380)	(68,000)
Total, NTIS.......................	386	37,272	347	76,000	415	68,000
	(335)	(34,049)	(346)	(68,000)	(380)	(68,000)

Note: Numbers not in parenthesis are full-time permanent positions and budget authority. Numbers in parenthesis are total FTE and obligations.

1/ Matched by offsetting collections.
2/ The NTIS Revolving Fund replaced the NTIS Trust Fund in FY 1993.

Exhibit 16

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) over 1994 Base
Personnel Data					
Personnel financed from direct obligations					
Full-Time equivalent Employment:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0
Authorized positions:					
Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0
Personnel financed from offsetting collections					
Full-Time equivalent Employment:					
Full-time permanent	311	317	351	351	0
Other than full-time permanent	24	29	29	29	0
Total	335	346	380	380	0
Authorized positions:					
Full-time permanent	386	347	415	415	0
Other than full-time permanent	43	43	43	43	0
Total	429	390	458	458	0

1/ This activity was funded in FY 1992 through the Information Products and Services account. The NTIS Public Enterprise Revolving Fund was established in FY 1993 replacing the Information Products and Services Account in FY 1993.

Exhibit 34

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Consulting services	0	0	0
Management and professional services 1/	$60	$80	$80
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
TOTAL	$60	$80	$80

Providing products and services into the world marketplace, and serving as the primary source for the public sale of Government-sponsored research and engineering reports, research in progress information, machine-processable data files and computer software, NTIS must acquire services supporting its varied operations.

In an effort to modernize operations to most effectively achieve its mission, NTIS acquired services to provide technical expertise on how to respond entrepreneurially to new technology, business strategies regarding information technology, and advice on the design of an overall information system architecture, as well as advise on procurement matters for this effort.

To better serve customers, services supporting information products about the biotechnology and medical industry, were acquired. These services included identifying new product configurations, and identifying strategic marketing plans.

Other management and professional services acquired in FY 1992 included: writing and editing activities for various promotional activities, technical and professional services to manage the execution of a conference, and advice concerning industry accounting practices for databases.

1/ Funded by Information Products and Services in FY 1992, and the NTIS Revolving Fund in FY 1993 and FY 1994.

Exhibit 35

Department of Commerce
National Technical Information Service
NTIS Revolving Fund
PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(dollars in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals 1/	$4	$7	$8	$9
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	$4	$7	$8	$9

Providing products and services into the world marketplace, and serving as the primary source for the public sale of Government-sponsored research and engineering reports, research in progress information, machine-processable data files and computer softwars, NTIS must acquire periodicals supporting these functions.

NTIS acquires various periodicals supporting it's businsss type activities as well as it's government activities. Marketing and promotion periodicals were purchased to provide insight into current trends, as well as marketing forecasts, which enabled NTIS to make the widest dissemination of information possible. Periodicals providing information about the latest computer software, and management objectives/techniques helped to continually improve service to customers using more efficient and effective methods of operations. Reference manuals, identifying essential information required to complete the records input into the NTIS database are a necessary acquisition to ensure complete useful data to customers.

1/ Funded by Information Products and Services in FY 1991 and 1992 and the NTIS Revolving Fund in FY 1993 and FY 1994.

Exhibit 36

DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL INFORMATION SERVICE
NTIS Revolving Fund
AVERAGE GRADE AND SALARIES

	1992 Actual	1993 Estimate	1994 Estimate
Reimbursable:			
Average ES Grade	3.3	3.3	3.3
Average GS/GM Grade	7.1	7.2	7.8
Average GS/GM Salary	$31,103	$32,400	$33,900

Exhibit 1

Department of Commerce
National Institute of Standards and Technology

BUDGET ESTIMATES, FISCAL YEAR 1994
PRESIDENT'S SUBMISSION

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Exhibit 2

U.S. DEPARTMENT OF COMMERCE
National Institute of Standards and Technology

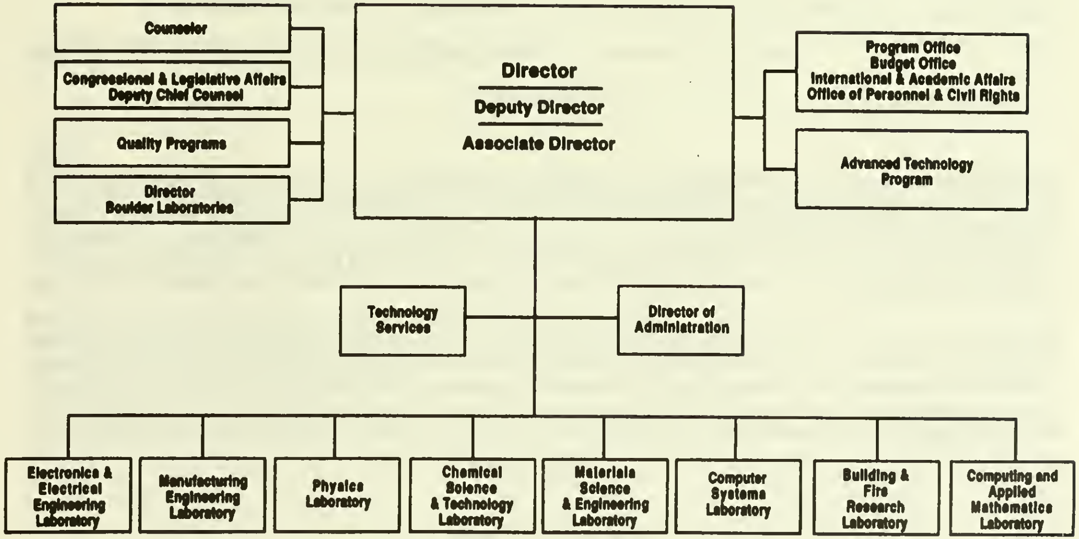
Counselor
Congressional & Legislative Affairs
Deputy Chief Counsel
Quality Programs
Director
Boulder Laboratories
Director
Deputy Director
Associate Director
Program Office
Budget Office
International & Academic Affairs
Office of Personnel & Civil Rights
Advanced Technology Program
Technology Services
Director of Administration
Electronics & Electrical Engineering Laboratory
Manufacturing Engineering Laboratory
Physics Laboratory
Chemical Science & Technology Laboratory
Materials Science & Engineering Laboratory
Computer Systems Laboratory
Building & Fire Research Laboratory
Computing and Applied Mathematics Laboratory

Exhibit 3

GENERAL STATEMENT

Goals of the Program

The Technology Administrations' National Institute of Standards and Technology (NIST) is the Federal laboratory explicitly charged with providing technical research and services in support of U.S. industry's competitiveness objectives. The Omnibus Trade and Competitiveness Act of 1988 directed the Institute to perform functions to 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of precompetitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide the measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes, and public safety.

NIST has both the legislative authority and extensive experience to work cooperatively with U.S. industry. In fact, NIST has provided a steady stream of technology support to U.S. firms for over 90 years. This places NIST in a strong position to play a central role in accelerating the development and commercialization of civilian technology. NIST currently has 1) research partnerships and other mechanisms in place to accelerate technologies; 2) manufacturing extension centers that can give small businesses easy access to technical advances and know-how; 3) programs that support a national information infrastructure and manufacturing applications critical for economic expansion; 4) sustained support for basic science to protect the source of future innovations; and 5) national user facilities that make sophisticated research tools available to industry.

Statement of Objectives

NIST performs numerous functions to fulfill its mandate and the ever growing responsibility that it implies.

- provides supporting technologies, including measurements, test methods, and standards, required in U.S. industry's effort to increase productivity and quality;

- contributes to the development of generic, pre-competitive technologies that have the potential to be applied to a broad range of products or processes which may affect U.S. competitiveness;
- facilitates the diffusion of technologies that are potentially important to U.S. competitiveness, to all segments of the economy; and
- provides the supporting technology necessary for developing and establishing international technical standards compatible with U.S. technology.

NIST fulfills these functions through synergistic programs of support for civilian research and development efforts by industry, diffusion of technology, and internal laboratory research and development.

To strengthen industry-government cooperation and to provide more federal support for precompetitive, generic research and development, the Advanced Technology Program shares the costs of industry-defined and industry-led projects selected through merit-based competitions.

To enhance the use of and access to technology, the Manufacturing Extension Partnership helps small and medium-sized manufacturers adopt modern technologies. Federal funds are matched by state and local government to create a national network of manufacturing extension centers. The NIST Quality Outreach program fosters leadership in quality and competitiveness through government/industry partnerships.

The Laboratory research programs strengthen industry-government cooperation and support commercial research, development, production, and market development. Measurement methods and other "infratechnologies" needed by U.S. industry to compete internationally are developed by NIST laboratories. Research activities range from long-term fundamental studies, which provide new knowledge and capabilities needed to support more applied work, to the development of test methods, measurements, and standards which facilitate advances in particular technologies. Federal Coordinating Council on Science, Engineering, and Technology (FCCSET) program activities, including advanced supercomputers and computer networks, math and science education, materials processing, biotechnology, and advanced manufacturing, are a critical segment of NIST's commercial research and development support.

NIST advances move to industry through a variety of mechanisms, including interactions between industry and NIST bench scientists in NIST laboratories, in industrial laboratories, and at professional meetings; adoption in private sector product standards; issuance of Standard Reference Materials and Standard Reference Data; and programs designed explicitly to reach those segments of American industry which traditionally have not been direct recipients of Institute developments. NIST's outreach programs yield a direct benefit to intramural laboratory research by providing the laboratory staff with the opportunity to review technical proposals and, when appropriate, to provide technical support to awardees. These interactions also help to keep NIST internal programs abreast of new developments in industrial research and applications.

Summary of Performance and Resources

NIST requests total appropriations of $535,198,000 in FY 1994 to carry out the objectives listed above. Included in the total request is $43,800,000 for Scientific and Technical Research and Services (STRS) and $144,000,000 for Industrial Technology Services (ITS) which are part of the Administrative's investment strategy. The investment request is contingent upon enactment of an omnibus budget reconciliation act that contains the President's deficit reduction package. The NIST budget is divided into three appropriation requests: Scientific and Technical Research and Services, which includes a $48,048,000 increase for the intramural laboratory based NIST programs; Industrial Technology Services, which includes a $146,457,000 increase for extramural programs; and Construction of Research Facilities, where we are in the second year of the A&E effort associated with a major facilities up-grade and renovation program. The total request, an increase of $151,191,000 over the FY 1993 level of $384,007,000 is a 39 percent total increase for NIST programs.

The following is a comparison of the FY 1993 appropriated level with the FY 1994 budget request and related data on employment.

(Dollar amounts in thousands)

	1993 Appropriation		1994 Estimate		Increase or (Decrease)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Scientific and Technical Research and Services	1,696	$192,940	2,046	$240,988	350	$48,048	1,568
Industrial Technology Services	91	86,067	185	232,524	94	146,457	76
Construction of Research Facilities	...	105,000	5	61,686	5	(43,314)	
TOTAL	1,787	384,007	2,236	535,198	449	151,191	

Summary of Proposed Budget Increases

Adjustments to base and built-in changes in all three appropriations result in a increase of 12 positions and a decrease of $38,609,000.

- Scientific and Technical Research and Services (STRS) adjustments to base include: $4,000,000 to purchase heavy water for the NIST Research Reactor to meet operating requirements for safety; a transfer of 7 positions and $800,000 of current STRS resources supporting the Quality Program to the ITS appropriation; a transfer of 5 positions and $5,000,000 to the CRF appropriation to fund the architectural and engineering studies associated with NIST's facilities upgrade and expansion program;

a $925,000 reduction in equipment resources required for the DoC Consolidated Computer System; $895,000 for annualization of the FY 1993 pay raise; and $1,879,000 for within grades and mandated changes in personnel benefits.

o Industrial Technology Services (ITS) adjustments to base include a transfer of 7 positions and $800,000 from the STRS appropriation for partial funding of the Quality Outreach Program.

o Construction of Research Facilities (CRF) adjustments to base include decreases totaling $48,314,000 and the transfer of 5 positions and $5,000,000 from STRS for A&E studies required for the major facilities upgrade and renovation.

Scientific and Technical Research and Services program changes totaling 362 positions and $43,800,000 represent a 23 percent increase for in-house laboratory research and development. These investment increases are part of the plan to double the funding for R&D work carried out by NIST labs over the next four years. The FY 1994 increment will substantially increase the research and development effort in critical technologies.

o Electronics. NIST requests 32 positions and $4,000,000 to provide for advanced measurement support for semiconductor manufacturing, high performance microwave integrated circuits, magnetic storage, and new quantum standards, as well as basic research needed to develop such support. This investment will help U.S. companies improve their competitive position in the worldwide electronics manufacturing industry.

o Advanced Manufacturing. NIST requests 31 positions and $4,200,000 to promote U.S. industrial competitiveness through accelerated investment in advanced manufacturing technologies. This initiative will develop cutting-edge laboratory capabilities in the standards, measurement, control, and processing aspects of advanced manufacturing.

o Biotechnology and Chemical Processing. NIST requests 26 positions and $3,000,000 to provide the U.S. biotechnology and chemical process industries with new measurement techniques and standards, predictive models and reference data, and engineering technology needed to improve processing efficiency, minimize or eliminate chemical wastes, and accelerate commercialization of bio- and chemical products, thus maintaining a significant share of the world chemical and biochemical markets in such diverse sectors of the economy as agriculture, pharmaceuticals, specialty chemicals, and health care products.

o Advanced Materials and Processing. NIST requests 61 positions and $6,600,000, which will enable NIST to participate with industry in bridging the gap between bench scale conception and commercial utilization of advanced materials and advanced processing. The proposed NIST program builds on existing strengths in metals, ceramics, polymers, organic matrix composites, and cementitious materials and extends the areas of technical coverage to include synthesis and processing of advanced materials as well as materials process integration. NIST will involve industry in every stage of research and development to ensure that the technology developed is relevant to industry's needs and to ensure that it is readily transferred to industry.

- High Performance Computing and Communications (HPCC)/Information Infrastructure. NIST requests 200 positions and $24,000,000 as part of the multi-agency HPCC program as described in the High Performance Act of 1991 and the Information Infrastructure and Technology Act of 1992. NIST activities will expand and integrate its programs in performance measurement, communications protocols, advanced software and advanced manufacturing applications in research and development, and the development of the National Research and Education Network (NREN).

- International Trade and Standards. NIST requests 12 positions and $2,000,000 to promote long-term economic growth through increased international competitiveness. This initiative will enhance the flow of vital standards-related information to manufacturers and exporters by assigning standards advisors to selected U.S. Embassies and Missions; expanding the capabilities of domestic legal metrology laboratories operated by state governments and the private sector; and harmonizing standards with our trading partners and international organizations.

Industrial Technology Services program changes totaling 75 positions and $146,000,000 represent a 170 percent increase over FY 1993. These programs support a variety of mechanisms for extending technology to American Industry and fostering the development of generic pre-competitive technology by industry.

- Advanced Technology Program. NIST requests 62 positions and $132,000,000 to significantly expand its three-year-old program to share the cost of high-risk research projects with U.S. companies and industry-led joint ventures seeking to develop new precompetitive generic technologies. Through a rigorous, competitive review process and by allowing industry to choose the topics it wished to pursue, NIST has demonstrated that the ATP can leverage industrial research and development funding from companies and joint ventures of all sizes and in all industrial sectors. This increase would enable the funding of approximately 120 more joint ventures and single company projects.

- Manufacturing Extension Partnership. NIST requests an increase of 9 positions and $12,000,000 to begin implementation by NIST of the Manufacturing Extension Partnership (MEP), including a nationwide network of manufacturing extension centers called for by President Clinton in his *Vision of Change for America* to assist manufacturers to modernize their production capability. Coupled with the existing Manufacturing Technology Centers and State Technology Extension Program, the MEP will create a single, integrated program for continuous technological advancement.

- Quality Outreach. NIST requests 4 positions and $2,000,000 to extend the U.S. status in quality and U.S. competitiveness by training "quality" leaders and assessors, providing feedback on quality improvement practices, applying quality principles to industrial research and development, enhancing ways to transfer information about quality concepts, and exploring the extension of the quality concept to public benefit areas such as health and education.

Reimbursable Program

NIST's reimbursable services consist of technical work performed for other Federal agencies, state and local governments, and the private sector. They include calibrations and special tests, advisory services, and the sale of Standard Reference Materials. The unique measurements and standards expertise developed with appropriated funding gives NIST the capability to perform these services on a reimbursable basis. NIST accepts other agency work based on an established set of criteria which include (1) the need for traceability of measurements to national standards; (2) the need for work which cannot or will not be addressed by the private sector; (3) work supported by legislation that authorizes or mandates certain services; (4) work which would result in an unavoidable conflict of interest if carried out by the private sector or regulatory agencies; and (5) requests by the private sector for NIST action or services. In FY 1992, NIST's reimbursable program totaled $144.7 million; estimates for FYs 1993 and 1994 are $150.4 million and $151.4 million respectively.

Exhibit 5

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for 1993 as shown in 1994 President's Budget	1,696	$194,064	1,800	$203,782
	less: Dec. 17, 1992 Proposed transfer (allowed by P.L. 102–395)		(2,000)		(2,000)
	plus: Working Capital Fund transfer		876		
	Appropriation Available, 1993	1,696	192,940	1,800	201,782
	less: Unobligated balance from prior years				(9,718)
	plus: Working Capital Fund adjustment				826
NIST–15	plus: 1994 Adjustments to base	(12)	4,248	8	4,248
	1994 Base	1,684	197,188	1,808	197,138
	plus: 1994 Investments	362	43,800	293	37,160
	1994 Appropriation request	2,046	240,988	2,101	234,298
	less: Working Capital Fund transfer		(6,690)		
	1994 Estimate	2,046	234,298	2,101	234,298

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Comparison by activity:		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
	Measurement and engineering research and standards											
NIST–25	Electronics and electrical engineering	Pos./BA	226	25,039	260	26,508	258	26,668	290	30,668	32	4,000
		FTE/Obl.	248	23,142	275	26,175	275	26,668	298	29,798	23	3,130

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Comparison by activity:		Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
NIST-37	Manufacturing engineering	Pos./BA	104	9,485	114	10,092	112	10,200	143	14,400	31	4,200
		FTE/Obl.	114	9,304	121	10,088	120	10,200	143	13,560	23	3,360
NIST-49	Chemical science and technology	Pos./BA	178	18,533	194	19,303	192	20,054	218	23,054	26	3,000
		FTE/Obl.	195	18,308	206	19,569	206	20,004	225	22,639	19	2,635
NIST-63	Physics	Pos./BA	207	25,470	225	26,372	223	26,884	223	26,884	0	0
		FTE/Obl.	226	25,561	240	26,482	240	26,884	240	26,884	0	0
NIST-69	Materials science and engineering	Pos./BA	234	27,678	290	35,568	287	40,636	348	47,236	61	6,600
		FTE/Obl.	256	27,170	309	39,935	309	40,636	355	46,586	46	5,950
NIST-81	Building and fire research	Pos./BA	101	10,983	113	12,070	113	12,873	113	12,873	0	0
		FTE/Obl.	111	11,044	119	12,091	121	12,873	121	12,873	0	0
NIST-89	Computer systems	Pos./BA	127	11,797	140	12,141	138	13,080	338	37,080	200	24,000
		FTE/Obl.	140	11,652	148	12,463	148	13,080	321	33,225	173	20,145
NIST-103	Applied mathematics and scientific computing	Pos./BA	65	6,490	70	6,779	70	7,002	70	7,002	0	0
		FTE/Obl.	71	6,540	75	6,829	76	7,002	76	7,002	0	0
NIST-109	Technology assistance	Pos./BA	104	10,971	85	8,522	85	8,534	97	10,534	12	2,000
		FTE/Obl.	114	10,651	92	8,920	93	8,534	102	10,474	9	1,940
NIST-121	Research support activities	Pos./BA	204	36,554	205	35,585	206	31,257	206	31,257	0	0
		FTE/Obl.	223	35,261	215	39,230	220	31,257	220	31,257	0	0
	Direct obligations	Pos./BA	1,550	183,000	1,696	192,940	1,684	197,188	2,046	240,988	362	43,800
		FTE/Obl.	1,698	178,633	1,800	201,782	1,808	197,138	2,101	234,298	293	37,160

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount
Adjustments to obligations:										
Recoveries		(934)								
Unobligated balance, start of year		(6,472)		(9,718)						
Unobligated balance, end of year		9,718								
Financing from transfers:										
Transfers to other accounts		2,055		876		50		6,690		6,640
Appropriation		183,000		192,940		197,188		240,988		43,800

Exhibit 7

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Total Obligations	$178,633	$201,782	$197,138	$234,298	$37,160
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non–Federal sources	0	0	0	0	0
Recoveries	(934)	0	0	0	0
Unobligated balance, start of year	(6,472)	(9,718)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	9,718	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	180,945	192,064	197,138	234,298	37,160
Financing:					
Transfer to other accounts	2,055	876	50	6,690	6,640
Appropriation	183,000	192,940	197,188	240,988	43,800

Exhibit 8

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Increase/(Decrease)		
	Perm. Pos.	FTE	Amount
Transfers:			
Quality program transfer to ITS appropriation	(7)	(7)	($800)
Architectural and engineering transfer	(5)	(5)	(5,000)
Subtotal, transfers	(12)	(12)	(5,800)
Adjustments:			
Reactor heavy water	0	0	4,000
FY 1994 Supercomputer adjustment	0	0	(925)
FTE adjustment	0	18	0
Subtotal, adjustments	0	18	3,075
Other Changes:			
1993 Pay raise	0	0	895
Annualization of prior-year positions	0	2	0
Within-grade step increases	0	0	1,117
Civil Service Retirement System (CSRS)	0	0	(140)
Federal Employees Retirement System (FERS)	0	0	259
Thrift Savings Plan	0	0	40
Federal Insurance Contributions Act (FICA) - OASDI	0	0	108
Health Insurance	0	0	560
Employees' Compensation Fund	0	0	(65)
Travel: Per diem	0	0	84
Transportation of things	0	0	7
Rental payments to others	0	0	5

Communications, utilities, and miscellaneous charges:			
Other telephone	0	0	5
Rental of equipment	0	0	32
Utilities	0	0	764
Printing and reproduction	0	0	17
Other services:			
WCF	0	0	76
Other services	0	0	1,899
Supplies and materials	0	0	186
Equipment	0	0	1,124
Subtotal, other changes	0	2	6,973
Total, adjustments to base	(12)	8	4,248

Exhibit 9

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Transfers:		
Quality program transfer to ITS appropriation	(7)	($800)

NIST proposes an appropriation transfer of 7 FTEs and $800,000 of STRS resources to the ITS appropriation in support of the Quality Program. These resources constitute NIST's maximum available contribution of appropriated funds to the increased Quality Outreach program described in the program change section of the ITS budget.

	FTE	Amount
Architectural and engineering transfer	(5)	(5,000)

A transfer of $5 million and 5 FTEs from the STRS appropriation to the CRF appropriation is requested. This funding is for architectural and engineering design required for NIST's facilities upgrade and expansion program and is being transferred to the CRF appropriation to consolidate all activities related to the facilities expansion program.

	FTE	Amount
Adjustments:		
Reactor heavy water	0	4,000

An adjustment of $4 million is needed to purchase heavy water for the NIST reactor. When the reactor was commissioned, the initial charge of heavy water was loaned to NIST (at no cost) by what is now the Department of Energy, with the understanding that DoE retained title to the water, which would be returned to them at the end of the reactor's lifetime. This heavy water becomes increasingly radioactive as the reactor operates, and it has been periodically reprocessed by DoE (at Savannah River) in order to remove the tritium and thereby reduce the radioactivity to safer limits. However, DoE no longer makes or reprocesses heavy water at Savannah River or anywhere else in the U.S. NIST needs to replace the reactor's charge of heavy water in the FY 1994-1995 time frame to meet operating requirements, and DoE can no longer provide a full recharge as they have in the past. While they have agreed to supply NIST with 36,000 kilograms (practically their entire remaining inventory) to make up for evaporation and partial replacement, another 20,000-25,000 kilograms will have to be purchased elsewhere at an estimated cost of $4 million.

The only country that currently produces heavy water is Canada. The Canadians are willing to sell us the additional heavy water as long as it is not used for weapons purposes. Additionally, it is possible that the Russians may have some water of the quality we require. An adjustment to base of $4 million will be needed in FY 1994 in order to purchase the balance of heavy water needed and proceed with the planned replacement. This charge should last about seven years, at which time all of the replacement water will have to be purchased, with the cost running possibly $20 million.

FY 1994 Supercomputer adjustment 0 (925)

The Scientific Computing Upgrade initiative included the purchase of two components in FY 1993: the Boulder Interactive and the HIPPI Net systems. Since these were one-time purchases, there is a net decrease of $925,000 in FY 1994. The costs of maintaining the newly acquired systems beginning in FY 1994 has been included in the upgrade budget. In addition, the figure scheduled to drop out in FY 1995, adjusted for increased staffing costs and the costs of maintaining existing equipment will be $925,000. The operating level for FY 1994 will be $5,142,000 and the adjusted level for FY 1995 and beyond will be $4,217,000.

FTE adjustment 18 0

NIST requires an adjustment of 18 FTEs to restore a one-time reduction of FTEs in FY 1993.

Other Changes:

Full-year cost of 1993 pay increase and related costs 0 895

A pay raise of 3.7% was effective January 1, 1993.

Total cost in FY 1994 of 1993 pay increase	3,580
Less amount funded in FY 1993	(2,685)
Less amount absorbed	0
Amount requested in FY 1994 to provide full-year cost of 1993 pay increase	895

Annualization of prior-year positions 2 0

NIST requires an additional 2 FTEs to staff FY 1993 Congressional increases at their full operating level in FY 1994.

Within-grade step increases	0	1,117

An increase of $1,117,000 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases, including merit pay increases, which will be earned in FY 1994.

Estimated number of within-grade step increases	1,641
Step increases not earned due to turnover (5.78% x 1,641)	95
Average step above step 1 per separation	3
Average cost per within-grade step increase	1,167
Gross cost of scheduled step increases ($1,167 x 1,641)	1,915,047
Less savings due to separations ($1,167 x 95 x 3)	(332,595)
Subtotal, personnel compensation	1,582,452
STRS share (61.5%)	973,208
Benefits	144,086
Total adjustment to base	1,117,294

Personnel benefits	0	762

Civil Service Retirement System (CSRS)	(140)
Federal Employees Retirement System (FERS)	259
Thrift Savings Plan	40
Federal Insurance Contribution Act (FICA) - OASDI	108
Health Insurance	560
Employees' Compensation Fund	(65)

Civil Service Retirement System (-$140,000) - The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 57.4 percent in FY 1993 to 55.3 percent in FY 1994. Contribution rates will remain the same.

Payroll subject to retirement systems ($95,527,000)	
Cost of CSRS contributions in FY 1994 ($95,527,000 x .553 x .07)	$3,697,850
Cost of CSRS contributions in FY 1993 ($95,527,000 x .574 x .07)	3,838,275
Total adjustment to base	(140,425)

Federal Employees Retirement System ($259,000) - The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 42.6 percent in FY 1993 to 44.7 percent in FY 1994. The contribution rate will remain the same.

Payroll subject to retirement systems ($95,527,000)	
Basic benefit cost in FY 1994 ($95,527,000 x .447 x .129)	$5,508,373
Basic benefit cost in FY 1993 ($95,527,000 x .426 x .129)	5,249,591
Total adjustment to base	258,782

Thrift Savings Plan ($40,000) - The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The contribution rate is expected to remain 2 percent.

Thrift plan cost in FY 1994 ($95,527,000 x .447 x .02)	$854,011
Thrift plan cost in FY 1993 ($95,527,000 x .426 x .02)	813,890
Total adjustment to base	40,121

Federal Insurance Contributions Act (FICA) - OASDI ($108,000) - As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax will rise from $57,300 in FY 1993 to $60,150 in FY 1994. The OASDI tax rate will remain 6.2 percent in FY 1994.

FERS payroll subject to FICA tax in 1994 ($95,527,000 x .447 x .9470 x .062)	$2,507,121
FERS payroll subject to FICA tax in 1993 ($95,527,000 x .426 x .9503 x .062)	2,397,663
Increase (FY 1993-FY 1994)	109,458
OTP payroll subject to FICA tax in FY 1994 ($4,950,500 x .9470 x .062)	290,664
OTP payroll subject to FICA tax in FY 1993 ($4,950,500 x .9503 x .062)	291,677
Decrease (FY 1993-FY 1994)	(1,013)
Total OASDI increase	108,445

Health insurance ($560,000) - Effective January 1992, NIST's contribution to Federal employees' health insurance premiums increased by $910,000. The STRS share of this increase is $560,000. The total increase was computed based on employee participation in the various health benefit plans and the associated increases.

Employees' Compensation Fund (-$65,000) - Employees Compensation Fund bill for the year ending June 30, 1992, is $65,000 lower than the bill for the year ending June 30, 1991. The charges will be reimbursed to the Department of Labor pursuant to 5 U.S.C. 8147.

Travel per diem 0 84

Effective January 1992, the General Services Administration raised per diem rates. This increase results in a 6.2 percent increase to NIST. This percentage was applied to the FY 1993 STRS estimate of $1,347,000 to arrive at an increase of $84,000.

Transportation of things 0 7

The cost of transporting such things as household goods, scientific instruments, and hazardous materials increased during the past year. The $7,000 increase was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimate of $279,000.

Rental payments to others 0 5

The Joint Institute for Laboratory Astrophysics (JILA) is the organizational entity of the cooperative agreement between the University of Colorado and NIST. The University of Colorado and NIST share a building constructed for JILA on the University campus. The rental agreement provides for annual, built-in, inflationary increases based on the Consumer Price Index. The increase in the rental contract is expected to cost an additional $7,400. The STRS share of this increase is $5,000.

Communications, utilities, and miscellaneous charges 0 801

Communications	5
Rental of equipment	32
Utilities	764

Communications ($5,000) - The increase of $5,000 is the STRS portion of the $8,911 increase to the Rolm Phone contract, due to a 4 percent escalation rate each year for Gaithersburg telephone services.

Rental of equipment ($32,000) - An increase of $16,000 for rental of equipment was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimates of $17,000 for computer and EAM equipment, $319,000 for other equipment, and $321,000 for office copying equipment. In addition, an increase of $16,000 for rental of motor vehicles results from a GSA rate escalation for motor vehicle services.

Utilities ($764,000) - This adjustment to base is required to pay the additional cost of electricity, natural gas, water/sewer, and refuse disposal, arising from rate increases in FY 1992. The STRS share of this increase is $764,000.

Printing and reproduction 0 17

GPO has provided an estimated rate increase of 3.7 percent. This percentage was applied to the FY 1993 estimate of $451,000 to arrive at an increase of $17,000.

Other services 0 1,975

Increases in costs for recurring contractual support services have been experienced. This is due principally to increases in salary costs for the services performed, increases in costs for materials and supplies, increases in costs of computer support, and increases for equipment maintenance. A detail by service follows:

Services	FY 1993 Budget	Revised Estimate	Increase In Cost
MASC payments	1,731	1,754	23
MSC payments	476	500	24
WCF GA	1,631	1,707	76
Periodicals	400	464	64
Supercomputer	575	594	19
JILA contract	469	523	54
Visiting fellows program	582	674	92
Training	801	871	70
ADP services	3,613	3,943	330
Maintenance of equipment	3,942	4,364	422
Postdoctoral research fellowship program	77	81	4
Patents	153	238	85
Other support services	14,509	15,221	712
Total other services increase	28,959	30,934	1,975

Supplies and materials 0 186

Laboratory and general supplies ($186,000) - Based on the GDP deflator of 2.4 percent, the cost of supplies and materials is expected to increase by $186,000 from the FY 1993 estimate of $7,741,000.

Equipment		0	1,124
Depreciable Equipment:			
Office-ADP-Other equipment	38		
Laboratory equipment	1,086		

Office-ADP-Other equipment ($38,000) - The $38,000 increase was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimate for office machines, ADP, and other equipment.

Laboratory equipment ($1,086,000) - Funding of $1,086,000 is requested to finance the principal position of the STRS increase in equipment costs caused by the effects of inflation. The increase was based on applying the GDP price deflator of 2.4 percent to the FY 1993 estimated inventory value for NIST laboratory equipment. The additional appropriated funds will be allocated to the NIST operating units to finance depreciation charges paid to the NIST Working Capital Fund. The FY 1986 Authorization Bill for NIST revised the NIST Organic Act language so that the Working Capital Fund could retain the additional collections necessary to replace equipment at its current replacement value.

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Electronics and electrical engineering

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Electronics and electrical engineering	Pos./BA	226	$25,039	260	$26,508	258	$26,668	290	$30,668	32	$4,000
	FTE/Obl.	248	23,142	275	26,175	275	26,668	298	29,798	23	3,130

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Electronics and electrical engineering

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Electronics and electrical engineering										
WCF transfers	0	0	0	$700	0	0	0	$870	0	$870
Reimbursable FTE/Obl	192	$16,881	186	17,389	184	$17,911	131	20,831	(53)	2,920
Total	192	16,881	186	18,089	184	17,911	131	21,701	(53)	3,790

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
ELECTRONICS AND ELECTRICAL ENGINEERING

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes. The measurement capability provided is principally in the form of 1) documented high-performance measurement methods for electronic and related quantities, and 2) national reference standards which assure the uniformity and accuracy of the measurement methods across all users nationwide.

Base Program

Through this program, NIST serves the U.S. electronics industry and its customers, including the U.S. Government, by providing the measurement support that the U.S. Industry needs to improve its competitive position. NIST provides measurement capability in two principal forms: measurement methods and national reference standards that assure the accuracy of the methods. These support: industrial research and development; quality control during manufacturing; marketplace transactions including entry of U.S. products to international markets; and product application. Measurement methods from this program support: the fundamental electronic technologies of semiconductors, magnetics, and superconductors that underlie all modern electronic systems; communications technologies including fiber optics and microwaves; electrical power systems; and electronic measurement instrumentation broadly. This program is conducted by NIST's Electronics and Electrical Engineering Laboratory.

The measurement capability provided by this program supports entities ranging from giant electric utilities and large aerospace companies to specialized instrument manufacturers employing just a few individuals. For example, NIST provides microwave antenna measurements used by every major U.S. aerospace company, thus supporting a U.S. microwave industry shipping an estimated $37 billion in 1991 of microwave equipment. NIST provides national reference standards that support the accuracy of the electric power meters on every home and business in the U.S., thus supporting the metering of $171 billion per year of electricity. NIST provides measurement capability reflected in voluntary industry standards affecting the manufacture of every new U.S.-made optical fiber communications line, thus supporting a U.S. fiber optics industry shipping $1.4 billion per year (1990) of components.

NIST's role is to remove measurement barriers that individual companies cannot overcome because they lack one or more of NIST's special characteristics: impartial position, acknowledged measurement capability, or imprimatur as the lead U.S. agency for measurements. These characteristics enable NIST to do what individual companies cannot: gain access to industry information needed to resolve industry-wide measurement problems; develop measurement solutions and national reference standards that benefit the industry as a whole across diverse product lines; and gain acceptance of those solutions by U.S. industry and its international customers so that U.S. products can be sold.

FY 1994 base program operating objectives include the following:

- Establish measurement systems and standard test methods for the characteristics of fiber lasers and amplifiers. Experiments have shown fiber amplifiers to be important to long-haul fiber optic trunk lines and transoceanic fiber optic cables. Fiber amplifiers are expected to play an important part in fiber to the home where budgeting of power is important. Trials have shown that fiber optics will be the best economic alternative for transmission of voice, data, and video to homes and to other users. The performance of the transmission systems and components will be the major consideration for competing for these new markets. The world wide market for fiber optic systems and components is presently $4 billion per year and is expected to be $7 billion by 1995.

- Strengthen the foundations of electromagnetic compatibility (EMC) and electromagnetic interference (EMI) measurements to assist industry in developing correct and efficient test methods essential for international trade and for meeting federal, state, and local emissions requirements. Develop measurement methods for testing both the electromagnetic emissions and susceptibility of electronic products and subsystems used in transportation, navigation, and many other industries. Provide expertise in electromagnetic field theory for EMI/EMC; develop special laboratory facilities for generation of precisely characterized electromagnetic fields; develop field transfer devices, precise signal sources, and computational tools; and maintain close interaction with industry and national and international standards committees.

- Establish new electrical measurement techniques and test structures for assuring the reliability of semiconductor devices. Provide leadership in coordinating activities of the reliability community by conducting and chairing industry wide workshops. Identify critical parameters affecting overall reliability of a multilevel interconnect process and determine the input control parameters and ranges for interconnect metallization sputter deposition systems. Develop and evaluate intelligent microelectronic sensors to provide real-time, *in situ* monitoring and control of metallization processes. Establish close collaborations with industry and other government agencies to provide advanced technology test samples and to assure technology transfer.

- Develop precision sampling techniques for the measurement of radio-frequency voltages from 1 MHz to 100 MHz with accuracies of ±50 parts per million at 1 MHz and ±0.3% at 100 MHz. Such accuracies are comparable to or exceed those of thermal voltage converters, which are the primary measurement standards of choice at the present time. Sampling techniques in the radio frequency (RF) region offer a number of advantages over thermal voltage converters, including miniaturization and the capability to make measurements in both frequency and time domains. The primary purpose is to provide high-accuracy standard instruments; the developed technology will impact the testing of all RF component.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	25	30	30	30	30	30
- number of new CRADAs signed	8	8	8	8	8	8
- number of research associates and other guest researchers	43	43	43	43	43	43
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	90	95	95	95	95	95
- Predictive Models						
-- number of predictive models under development	72	75	75	75	75	75
-- number of predictive models completed	25	25	25	25	25	25
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	6	6	6	6	6	6
-- number of new SRM's introduced	1	1	1	1	1	1
- Calibrations						
-- number of calibrations/tests performed	5,500	6,000	6,000	6,000	6,000	6,000

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical engineering	Pos./BA	258	$26,668	290	$30,668	32	$4,000
	FTE/Obl.	275	26,668	298	29,798	23	3,130

Investment Program: Electronics (32 Permanent positions, BA +$4,000,000, Direct Obligations +$3,130,000, Transfer to WCF +$870,000) - The objectives of this initiative are to provide measurement technology, standards, and advanced instrumentation to enable U.S. companies to improve their competitive position. The electronics industry is the largest basic industry in the U.S., the fastest growing manufacturing industry, and the largest industrial employer. The technological advances required for this industry to maintain or expand its market share depend upon increasingly complex, faster, smaller, and more densely packed systems. This proposal is a step toward providing the technological infrastructure needed to permit the electronics industry to advance.

Problem Magnitude and Scope:

The electronics industry is the largest industrial employer in the U.S., with 2 million people on its payroll. U.S. shipments of electronics products were $271 billion in 1991, and are growing at a rate of nearly 5 percent annually. The U.S. competitive position depends in large part on its ability to create new technologies or substantially advance existing technologies, because the much lower cost of labor in many foreign countries moves much of the production phase of established technologies out of the U.S. The growth and strength of the U.S. electronics industry now more than ever depends on new advances in devices, components, and measurement techniques. Improved manufacturing techniques emphasizing quality control, reliability, and yield will maximize the U.S. marketing potential of electronic products.

The NIST base program addresses electronic and photonic technologies and standards with particular emphasis on semiconductors, superconductors, magnetics, microwaves, optoelectronics, electric power, video, electromagnetic interference, electronic instrumentation, electronic manufacturing, and basic electrical standards. At present, the highest priorities for an expanded electronics program are driven largely by the industry's need to manufacture smaller, faster electronic systems. For example, the domestic semiconductor industry has initiated unified technology planning to develop the technology and enhanced infrastructure required to reamain competitive. The industry's goal is to achieve, cost-effectively, the required 250-fold increase in integrated circuit functional density over the next fifteen years. There is a particular emphasis on high frequency systems in industry because there has been a fundamental change in microwave technology itself and an increasing need for microwave electronics technology in other fields. The increasing demand for microwave technology by other fields includes advanced computers, satellite communications, mobile telephones, collision avoidance radar for automobiles, cordless computers, and intelligent highways. The rapidly changing world market for microwave technology products alone was likely greater than $74 billion in 1991, and U.S. companies had relatively little penetration into foreign markets. To maintain competitiveness across the broad spectrum of products based on magnetic materials (world market for magnetic materials is about $7 billion per year), U.S. industry is pursuing key goals in product performance while achieving attractive levels of cost, quality and reliability. For magnetic information storage, important performance goals include increased information density and speed. Other applications require lower energy loss or improved frequency response. Because the products they support are changing, electrical standards are also changing. Earlier electrical standards were based on batteries and wires and balances. Modern standards are based on microcircuits, operating at temperatures near absolute zero, and relying on active regions having relevant dimensions the size of a few atoms. The domestic industry needs all of the accuracy that NIST can provide to be competitive in the world market.

Why NIST:

NIST is unique in its ability and mission to provide measurement support through its impartial position, its acknowledged measurement capability, and its official imprimatur as the lead U.S. agency for the development of measurements and standards. NIST can do what individual companies cannot do: gain approval from industry for access to industry information needed to define and resolve measurement problems common to all companies. NIST has a very successful record of delivery of effective solutions to electronics measurement problems. Industry executives and standards bodies have stressed the urgency of increased NIST measurement support for the microwave industry. NIST's staff includes many of the world's leading physicists, electronics engineers, and chemists in this field today, plus expertise in supporting areas needed to meet the future needs of the electronics industry. In addition, NIST has facilities which are uniquely applicable to the study of fundamental physics phenomena underlying the operation of advanced devices, as well as to study the devices themselves.

Description of the Proposed NIST Technical Program:

This electronics program provides for advanced measurement support for semiconductor manufacturing, high-performance microwave integrated circuits, magnetic storage, and new quantum standards as well as basic research needed to develop such support. The support for semiconductor manufacturing focuses on the measurement technology to characterize the semiconductor materials, with greater precision and over smaller dimensions than are available today, throughout processing from the incoming material to the finished device, a key step toward meeting industry's goals. The support for microwave integrated circuits emphasize wafer-level standards, miniature individual components, and the dielectric and magnetic materials used in these components. In magnetic storage, the NIST program explores techniques to increase information density. The work in fundamental quantum standards explores new physical phenomena at the quantum level for generating electrical measurements with the accuracy needed by industry. Initial focus will be on the development of a new class of current standards based on single-electron tunneling. To help industry meet its needs for smaller, faster electronics, the supportive basic research emphasizes the control and manipulation of single atoms, molecules, and microstructures.

Economic Impacts:

This initiative is designed to help U.S. industries gain world market share by providing measurement technology which will support the development of advanced electronics. Semiconductor and magnetic devices are essential to the competitiveness of the broader electronic component and equipment industry. Fundamental quantum standards are the basis for quality assurance measurements. Closer coupling of the primary standards to manufactured products reduces calibration costs and increases measurement capability in industry with substantial benefit for improved process control and competitiveness. Increases in accuracy translate quickly into higher quality and more competitive products in world markets.

Costs and Benefits:

With funding of $4,000,000 requested per year, NIST will provide both near-term and long-term results of benefit to industry. The near-term benefits will be in the design and testing of advanced high-frequency devices, specifically through the development of microwave material measurement techniques; metrology needed by the domestic semiconductor industry; improved understanding of limitations to high density magnetic recording; and improved electrical standards. In the longer term, benefits will include new standards for miniature discrete microwave components; new standards for electrical measurements for industrial use; standardized in situ manufacturing metrology for advanced semiconductors; and improved magnetic recording technology.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and engineering research and standards
Subactivity: Electronics and electrical engineering
Investment Program: Electronics

Title		Grade	Number	Annual Salary	Total Salaries
Chemist		15	1	$66,609	$66,609
Electronics engineer		15	1	66,609	66,609
Physicist		15	4	66,609	266,436
Electronics engineer		14	1	56,627	56,627
Physicist		14	5	56,627	283,135
Research chemist		14	1	56,627	56,627
Electronics engineer		13	2	47,920	95,840
Physicist		13	4	47,920	191,680
Chemist		12	1	40,298	40,298
Electronics engineer		12	1	44,327	44,327
Physicist		12	1	40,298	40,298
Technician		11	4	33,623	134,492
Administrative/technical support		9	3	27,789	83,367
Technician		9	2	27,789	55,578
Secretary		5	1	20,173	20,173
Subtotal			32		1,502,096
Less lapse	26 %		(9)		(391,206)
Total full-time permanent (FTE)			23		1,110,890

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	23
Authorized Positions:	
Full-time permanent	32

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Electronics and electrical engineering
Investment Program: Electronics

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full–time permanent	$1,110	$1,110
11.9	Total personnel compensation	1,110	1,110
12.1	Civilian personnel benefits	321	321
21	Travel and transportation of persons	131	131
22	Transportation of things	79	79
23.3	Communications, utilities and miscellaneous charges	316	316
24	Printing and reproduction	14	14
25.2	Other services	709	709
26	Supplies and materials	323	323
31	Equipment	127	127
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	3,130	3,130
	Transfer to NIST Working Capital Fund		870
	Total increase requested		4,000

Electronics and Electrical Engineering
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$3,551	$3,658	$3,768
Army	1,254	1,292	1,331
Navy	1,626	1,675	1,725
Other	3,896	4,013	7,053
Subtotal, Department of Defense	10,327	10,638	13,877
Department of Commerce	492	507	522
Department of Justice	1,053	1,085	1,118
Department of Energy	547	563	580
National Aeronautics and Space Administration	249	256	264
Nuclear Regulatory Commission	84	87	90
Department of Transportation	196	202	208
Other	195	201	207
Total, Other Agency	13,143	13,539	16,866
Calibrations and Tests	2,214	2,280	2,348
Standard Reference Materials (SRM)	174	179	184
Technical and Advisory Services	1,350	1,391	1,433
Total, Reimbursable Program	16,881	17,389	20,831

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Manufacturing engineering

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Manufacturing engineering	Pos./BA	104	$9,485	114	$10,092	112	$10,200	143	$14,400	31	$4,200
	FTE/Obl.	114	9,304	121	10,088	120	10,200	143	13,560	23	3,360

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund

PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Manufacturing engineering

Line Item	1992 Actual Per–sonnel	1992 Actual Amount	1993 Currently Available Per–sonnel	1993 Currently Available Amount	1994 Base Per–sonnel	1994 Base Amount	1994 Estimate Per–sonnel	1994 Estimate Amount	Increase/ (Decrease) Over 1994 Base Per–sonnel	Increase/ (Decrease) Over 1994 Base Amount
Manufacturing engineering										
WCF transfers	0	0	0	$60	0	0	0	$840	0	$840
Reimbursable FTE/Obl	191	$24,516	184	25,252	183	$26,011	140	28,941	(43)	2,930
Total	191	24,516	184	25,312	183	26,011	140	29,781	(43)	3,770

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
MANUFACTURING ENGINEERING

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy and 2) provide measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes. The manufacturing engineering subactivity achieves these goals by conducting research in the areas of: high precision dimensional measurement and precision engineering; robotics and intelligent machines; manufacturing data description, data administration, and information processing; and advanced sensors for manufacturing processes. In addition, technical support is provided for joint industry committees which are developing voluntary standards for length, force, and a number of subsidiary standards. An active program of technology transfer to industry is achieved through joint research, industrial research associates, and publications, conferences, seminars, and workshops.

Base Program

Through this subactivity, carried out in the Manufacturing Engineering Laboratory, NIST provides measurement methods, calibration standards and a technical research base for interface standards and on-line quality assurance to enable mechanical manufacturing industries to develop more rapidly and adopt automation and other advanced manufacturing technologies. The mechanical manufacturing industries served by these programs comprise approximately one-third of the total contribution to the GNP by the manufacturing sector and include the automotive, commercial aircraft, consumer electronics, and machine tools industries. Almost one-half of the U.S. trade deficit is accounted for by this group of manufacturing industries.

NIST supplies U.S. industry with both the standards and measurement methods to support the current system of quality control. U.S. industries depend on NIST for services which assure dimensional compatibility of items manufactured at different sites, and to satisfy requirements for traceability to national standards as the global market demands ever higher quality.

NIST aids the automation of U.S. manufacturing by providing the information necessary to develop standard "interfaces" between manufacturing systems. Typical of such efforts was the NIST-coordinated work which resulted in the Initial Graphics Exchange Specification, an international

Model Data (STEP), now under development internationally, will permit the exchange of total design data between design, process planning and fabrication systems. NIST has a testbed facility for research on such integrated "knowledge-based" manufacturing systems. Other efforts include control systems for robots, autonomous vehicles, and factory automation for discrete parts, composites and material processing.

NIST has the mission to support development of manufacturing standards; a proven reputation and a high level of recognition in manufacturing research, standards, and technology transfer; and a position of third party neutrality.

FY 1994 base program operating objectives include the following:

- Calibration of a nanofabricated artifact standard against inter-atomic spacings and geometries using the fully-operational and error-mapped Molecular Measuring Machine.
- Conduct an in-depth study of the metrology needs of industry in precision-tolerance manufacturing.
- Improve the accuracy of calibrations and reduce the turn around time of calibrations.
- Improve the accuracy of machined parts by improved monitoring of the machining process.
- Demonstrate major elements of the Quality In Automation project on the factory floor.
- Design and build a testbed for evaluation of proposed standards for intelligent machine systems.
- Begin test and evaluation of the Standard Reference Model Open Systems Architecture developed under this technical area in FY 1993.
- Complete development of the framework and methodology required for the implementation of STEP application protocols.
- Development of a framework for the computer representation of in-progress engineering designs that could lead to a formal STEP definition of design knowledge.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	39	47	47	47	47	47
- number of new CRADAs signed	9	9	9	9	9	9
- number of research associates and other guest researchers	96	97	97	97	97	97
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	54	60	60	60	60	60
- Predictive Models						
-- number of predictive models under development	26	30	30	30	30	30
-- number of predictive models completed	10	15	15	15	15	15
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	4	4	4	4	4	4
-- number of new SRM's introduced	1	1	1	1	1	1
- Calibrations						
-- number of calibrations/tests performed	3,600	3,900	3,900	3,900	3,900	3,900

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing engineering	Pos./BA	112	$10,200	143	$14,400	31	$4,200
	FTE/Obl.	120	10,200	143	13,560	23	3,360

Investment Program: Advanced manufacturing (31 Permanent positions, BA +$4,200,000, Direct Obligations +$3,360,000, Transfer to WCF +$840,000) - This initiative seeks to support U.S. manufacturing industries in their efforts to increase international competitiveness by providing the measurements, standards and generic technology which those industries need to achieve higher quality, lower costs, and increased speed to market. The importance of advanced manufacturing technologies as a subject for attention has been recognized by OMB and the Office of Science and Technology Policy and is the subject of a new FCCSET presidential initiative on Advanced Manufacturing Technologies. All agencies with active programs or interests in advanced manufacturing, including Commerce, Defense, Energy, Interior, Agriculture, and NSF, are participating.

Problem Magnitude and Scope:

Faced with continuously increasing competition from all quarters of the globe, U.S. manufacturing industries - which represent 21 million jobs, over one-fifth of the Gross Domestic Product (GDP), and more than three trillion dollars in sales — are undergoing a critical transition from traditional to 21st-Century manufacturing techniques and technology. Yet U.S. manufacturing still trails its competitors in its adoption of advanced manufacturing. U.S. manufacturing industries addressed by this initiative range from aircraft and automobiles to computers and microelectronic devices. The processes by which these goods are produced are the physical processes by which parts are shaped to size and assembled (as in automobile production) to those where semiconductor wafers are photochemically processed, diced and mechanically assembled into devices. The size of the products or the features of those products range from the atomic-scale elements of emerging-technology quantum electronic devices to the large-scale erected structures such as aircraft, ships and buildings, many of which are one-of-a-kind.

Common to these products is foreign competition which, unmet, results — for industry — in decreased market share and shrinking profits and — for the nation — in lost jobs and diminished economic vitality. Symptomatic of such unmet competition is the more than $500 billion in U.S.

trade deficits in manufactured goods which accumulated over the period 1985-1990. In 1991 alone, the U.S. deficit in trade for machinery, transportation equipment and apparel was more than $70 billion.

To increase competitiveness, U.S. manufacturers are seeking to increase product quality, lower costs of production, and increase the speed with which they can bring innovation to market. They are doing so by introducing advanced manufacturing technologies, most often computer-based. These include specialized machine tools, robots, and sensor-based controls, and technologies for systems integration, coming to be known by terms such as agile manufacturing and concurrent engineering. Accompanying introduction of these technologies are a host of challenges specific to industries and technologies which are associated with achieving measurement-based control of tolerances and standards-based compatibility of systems.

Why NIST:

This initiative proposes an integrated effort on technical problem areas of U.S. manufacturing within the scope of NIST's unique mission. The problems to be addressed are those identified by industry, as in the report of the National Critical Technologies Panel, for which there have been calls for NIST efforts, as well as in the report on the 21st Century Manufacturing Enterprise Strategy. NIST proposes to respond to these needs within its unique mission to assist domestic manufacturing industries in the development and deployment of new technologies by providing measurement and standards support. In particular, NIST will deal with those aspects which industries tend not to, including development of manufacturing data and interface standards, measurement and testing techniques, and standard reference data. In carrying out this program, NIST will: collaborate with industry through CRADAs; build on its well-established relationships with industry groups such as the Association for Manufacturing Technology (formerly the National Machine Tool Builders Association), National Tooling and Machining Association (NTMA), PDES, Inc., and SEMATECH; and — to support achievement of quality goals within the network of suppliers — transfer technology through its Manufacturing Extension Partnership.

Description of the Proposed NIST Technical Program:

To address industry-identified needs, the proposed program will develop cutting-edge laboratory capabilities in the measurement, standards, control and processing aspects of advanced manufacturing and transfer technology to the spectrum of discrete-part manufacturing industries. The output of these services to industry will include laboratory-tested engineering principles, design, performance and properties data, validated measurement techniques, calibrated artifacts and technical input to industry voluntary standards associations.

This initiative encompasses research in the following areas: techniques for fabricating and measuring precision components, particularly in areas such as microelectronics, nanostructures and X-ray optics; test and inspection technologies and concepts to improve product quality; advanced machine, control and measurement technologies to improve manufacturing accuracy; and standards, guidelines and concepts for computer-aided design and production systems, subsystems and equipment.

Economic Impacts:

With manufacturing industries representing about three trillion dollars in sales and the value of direct measurements in manufacturing estimated to be 3-4 percent of sales, approximately $100 billion of U.S. industry's expenditures are directly impacted by NIST laboratory research, with a substantially larger amount indirectly affected through productivity and improved manufacturing product quality. A number of studies by the National Academy of Engineering and others have shown that the types of advanced manufacturing technology being developed under this initiative can dramatically improve the competitiveness of U.S. manufactures by improving product quality, shortening development times and lowering costs. Furthermore, the leading-edge technologies being developed at NIST are crucial ingredients to support important product developments in a wide range of industries, including microelectronics, computers, telecommunications, electro-optics, aerospace and transportation equipment, and machine tools.

Costs and Benefits:

With funding of $4,200,000 requested per year, NIST will provide both near-term and long-term results of benefit to Industry. For example: (1) in precision component fabrication and measurement, NIST will develop and demonstrate the necessary techniques and procedures to advance the state-of-the-art for such applications as microelectronics, nanostructures and X-ray optics; (2) in test and inspection technologies, NIST will develop new concepts and methods for precision parts, such as nanoscale artifacts, bearings and gears; (3) in the area of advanced machine, control and measurement technologies for accuracy improvement, NIST will investigate super-stiff, non-conventional frame machine tools and other advanced applications; and (4) in standards and guidelines for computer-aided systems and subsystems, NIST will examine such concepts as the use of performance measurements and reference models for intelligent manufacturing and engineering systems. Advances in each of these fields will enable U.S. manufacturers to incorporate these results in their production operations and equipment designs, thereby achieving better quality, lower cost, and reduced time-to-market.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and engineering research and standards
Subactivity: Manufacturing engineering
Investment Program: Advanced manufacturing

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	15	1	$66,609	$66,609
Electronics engineer	15	1	66,609	66,609
Mechanical engineer	15	2	66,609	133,218
Physicist	15	1	66,609	66,609
Computer scientist	14	1	56,627	56,627
Electrical engineer	14	1	56,627	56,627
Electronics engineer	14	1	56,627	56,627
Mechanical engineer	14	2	56,627	113,254
Physicist	14	2	56,627	113,254
Electrical engineer	13	1	47,920	47,920
Electronics engineer	13	1	47,920	47,920
Mechanical engineer	13	2	47,920	95,840
Physicist	13	1	47,920	47,920
Mechanical engineer	12	1	41,641	41,641
Physicist	12	1	40,298	40,298
Technician	12	3	40,298	120,894
Technician	11	1	33,623	33,623
Administrative/technical support	9	4	27,789	111,156
Mechanical engineer	9	1	36,123	36,123

Title		Grade	Number	Annual Salary	Total Salaries
Technician		9	1	27,789	27,789
Secretary		5	2	20,173	40,346
Subtotal			31		1,420,904
Less lapse	25 %		(8)		(355,226)
Total full-time permanent (FTE)			23		1,065,678
Personnel Data					
Full-Time Equivalent Employment:					
Full-time permanent			23		
Authorized Positions:					
Full-time permanent			31		

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Measurement and engineering research and standards
Subactivity: Manufacturing engineering
Investment Program: Advanced manufacturing

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full-time permanent	$1,066	$1,066
11.9	Total personnel compensation	1,066	1,066
12.1	Civilian personnel benefits	309	309
21	Travel and transportation of persons	112	112
22	Transportation of things	31	31
23.3	Communications, utilities and miscellaneous charges	272	272
24	Printing and reproduction	15	15
25.2	Other services	1,358	1,358
26	Supplies and materials	139	139
31	Equipment	58	58
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	3,360	3,360
	Transfer to NIST Working Capital Fund		840
	Total increase requested		4,200

Manufacturing Engineering
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$1,900	$1,957	$2,016
Army	1,567	1,614	1,662
Navy	12,005	12,365	14,666
Other	5,657	5,827	7,002
Subtotal, Department of Defense	21,129	21,763	25,346
Consumer Product Safety Commission	3	3	3
Department of Energy	87	90	93
Department of the Interior	194	200	206
National Aeronautics and Space Administration	416	428	441
Postal Service	157	162	167
Department of Transportation	164	169	174
Department of Veterans Affairs	249	256	264
Other	5	5	5
Total, Other Agency	22,404	23,076	26,699
Calibrations and Tests	1,225	1,262	1,300
Standard Reference Materials (SRM)	87	90	93
Technical and Advisory Services	800	824	849
Total, Reimbursable Program	24,516	25,252	28,941

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Chemical science and technology

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Chemical science and technology	Pos./BA	178	$18,533	194	$19,303	192	$20,054	218	$23,054	26	$3,000
	FTE/Obl.	195	18,308	206	19,569	206	20,004	225	22,639	19	2,635

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Chemical science and technology

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Chemical science and technology										
WCF transfers	0	0	0	$80	0	$50	0	$415	0	$365
Reimbursable FTE/Obl	187	$16,962	180	18,079	179	18,646	135	17,306	(44)	(1,340)
Total	187	16,962	180	18,159	179	18,696	135	17,721	(44)	(975)

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
CHEMICAL SCIENCE AND TECHNOLOGY

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes. The Chemical Science and Technology subactivity achieves these goals by conducting fundamental investigations on measurement based phenomena related to the composition and behavior of chemical and biochemical systems, while developing and improving measurement capability and quantitative understanding of the underlying physical principles of measurement science. The program is built around several continuous activities which are designed to identify industry's most pressing needs and transfer NIST-developed technology to industry quickly and effectively, utilizing joint research programs, the Research Associate program, memberships on standards committees, publications, conferences, seminars, workshops, and CRADAs (Cooperative R&D Agreements).

Base Program

NIST will develop new and improved measurement methods and standards for high accuracy chemical analyses; serve as the National Reference Laboratory, providing the underlying scientific basis and engineering measurement techniques, standards, data on key properties (thermophysical, thermochemical, and kinetic), predictive methods, and calibration and measurement services; and perform research on the structure and behavior of atoms and molecules in isolation, in clusters, and on surfaces. This research will assist U.S. industry to introduce competitive technology in the marketplace, and provide advances in chemical measurement science to address the needs of new high technology industries that produce higher value-added specialty chemicals, biochemicals, and components for the microelectronics industry. The measurement methods and reference materials from this program provide the basis for uniform measurements in the chemical, biochemical processing, clinical services, instrument manufacturing, metals-producing, and emerging high technology materials industries, as well as many Federal programs related to environmental pollution, toxic substances, and health services.

The diversity and nature of the required measurement technology and the scope and sizes of the industrial and public sectors involved are such that no single commercial organization has an economic incentive to produce, maintain, and interrelate the measurement methods, reference data, and reference materials, and to support the necessary standards infrastructure. Measurement solutions needed in measurement-intensive industries require not only NIST's impartial position relative to sellers and buyers but also its position as the Nation's lead agency for measurement, based on its special measurement expertise in this area.

FY 1994 base program operating objectives include the following:

- Develop ultra thin film sensors and other on-line measurement methods, standards, and data for hydrogen, hydrocarbons, and water to respond to the needs of the chemical and related industries for the real-time measurement of product concentrations and the monitoring and control of advanced chemical separations with the ultimate goal of extending laboratory processes to a commercial scale.

- Develop algorithms to estimate thermodynamic properties for all phases of hydrocarbon compounds of technological importance for inclusion in interactive databases for thermophysical, thermodynamic, and kinetic properties of chemicals and fuels to provide the basis for improved efficiency and increased by-product utilization in the chemical process and related industries.

- Develop measurement and computational techniques and databases for the determination of the crystalline structure of biomolecular species including enzymes, enzyme-substrate complexes and DNA species needed by the biotechnology industry and the health care and forensics testing communities.

- Develop new techniques such as slurry-sampling for graphite furnace atomic absorption spectrometry and laser-ablation inductively coupled-mass spectrometry for homogeneity evaluation and analysis of metals important in high technology industries.

- Develop advanced image plane detection and analysis schemes to extend trace compositional mapping to full, three-dimensional, quantitative compositional mapping.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	31	38	38	38	38	38
- number of new CRADAs signed	5	5	5	5	5	5
- number of research associates and other guest researchers	194	195	195	195	195	195
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	44	60	60	60	60	60
- Predictive Models						
-- number of predictive models under development	8	8	8	8	8	8
-- number of predictive models completed	6	6	6	6	6	6
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	41	37	37	37	37	37
-- number of new SRM's introduced	30	28	28	28	28	28
- Calibrations						
-- number of calibrations/tests performed	1,100	1,200	1,200	1,200	1,200	1,200

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Chemical science and technology	Pos./BA	192	$20,054	218	$23,054	26	$3,000
	FTE/Obl.	206	20,004	225	22,639	19	2,635

Investment Program: Biotechnology and chemical processing (26 Permanent positions, BA +$3,000,000, Direct Obligations +$2,635,000, Transfer to WCF +$365,000) - This increase will allow NIST to provide the U.S. biotechnology and chemical process industries with new measurement techniques and standards, predictive models and reference data, and engineering technology needed to improve processing efficiency, minimize and eliminate chemical wastes, and accelerate commercialization of bio- and chemical products - thus maintaining a significant share of the world chemical and biochemical markets.

Problem Magnitude and Scope:

Recent dramatic advances in biotechnology have provided the opportunity to exploit new processes that can contribute to diverse sectors of the economy including agriculture, pharmaceuticals, specialty chemicals, and health care products. Examples of biochemical products include pharmaceuticals, food processing agents/additives, insecticides, plant disease and growth regulators, and bulk chemicals. The FCCSET Committee on Life Sciences Report, "Biotechnology for the 21st Century," recognizes the impact that biotechnology will have on the nation's technological strength, economic growth, public health, and quality of life. The U.S. currently leads the world in biological research due primarily to the strong Federal investment, but this leadership is being challenged as the field changes and rapidly expands.

The chemical process industry, the largest manufacturing sector in the U.S. with $260 billion in sales, is a capital intensive and highly automated industry that produces about 1.5 tons of toxic chemical waste per capita per year in the U.S. By the year 2000, this will reach one-half billion tons per year costing more than $40 billion in 1988 dollars for disposal. Processing of wastes has the largest impact on the competitiveness of the chemical industry of any other factor, and competitiveness issues are driving this industry to change. Instead of "treating" waste, firms in the chemical processing industry are beginning to look at the entire manufacturing process, so that raw materials and energy are used to produce an array of products and no waste. Major chemical companies (Dow Chemical, Monsanto, DuPont and 3M among others) have already established internal programs to this end. "Industry has got to adjust its paradigm to incorporate waste reduction as a goal of process design," says Charles Harper, Vice President and Manager of Bechtel Environmental, Inc.

Why NIST:

NIST's role is to provide technology, measurement, standards and data support for U.S. industries in their efforts to develop and commercialize technologies required for international competitiveness, innovation, minimization of waste, and reduction of processing costs. Industry looks to NIST to provide underlying research and services that will complement industry's own efforts to improve competitiveness by conducting generic research critical to the development of quality products at a reasonable price and by providing measurement-related technology needed for the conversion to an enviro-economics driven market.

Biotechnology is highly interdisciplinary and NIST has the mission and capability to address many of the underlying technical issues in bioprocessing. An important part of the NIST biotechnology effort is the Center for Advanced Research in Biotechnology (CARB), a joint venture with the University of Maryland and Montgomery County, Maryland, where interdisciplinary, biotechnology-related resources from academia, industry, and government are combined to conduct research in structural and physical biochemistry and molecular biology.

The chemical, petrochemical and allied processing industries will rely heavily on the use of process simulators in the design of new processes, and for operation and modification of their plants. Many of these simulators currently utilize critically evaluated thermochemical, thermophysical, and chemical kinetic data generated by NIST. NIST's impartial position, internationally acknowledged expertise in measurement science and standard data and materials, and its close collaborative working relationship with chemical and biotechnology industries will be critical for a successful attack on the generic technological issues encountered.

Description of the Proposed NIST Technical Program:

The proposed NIST program builds on existing strengths in bioprocessing, biosensor technology, chemical kinetics, thermodynamics and process engineering, as well as standard reference materials, standard reference data, and analytical technologies. The proposed program will focus on:

a) New measurement techniques and sensors for real-time control: In-situ measurement capabilities will be developed for chemical and bioprocess reactors; sensors based on fiber optics, spectroscopic and solid state chemical sensors will be developed; mass spectrometry and gas chromatography will be extended to process measurements. Properties of biomolecules will be determined by optical methods; DNA and protein separations methodology including isoelectric focussing and electrophoresis techniques will be studied.

b) Standards, evaluated data and modelling: Thermochemical, thermophysical, and transport data for biomolecules, as well as estimation algorithms for thermodynamics and transport data, and thermodynamic models of bioseparation processes will be developed, and standard models of structural components of biomacromolecules for use by structural biologists will be developed.

c) Process technology: Membrane separation and purification, solvent extraction, and supercritical fluid extraction techniques will be developed for applications in chemical and biochemical processes; enzymes that function in non-aqueous environments will be developed for application in chiral syntheses for biomedical applications.

The NIST-developed technology will be transferred to industry via collaborative research efforts with industry, through trade organizations like the Association of Biotechnology Companies, Industrial Biotechnology Association, Chemical Manufacturers Association, Gas Research Institute, and American Petroleum Institute, and through industry consortia.

Economic Impacts:

Biotechnology has been identified as a critical emerging technology in every known study by government and private sector organizations. In 1991, sales of biotechnology products approached $4 billion and sales are expected to increase to more than $50 billion by the year 2000 according to the FCCSET Biotechnology report. Biotechnology has far-reaching implications for growth of the entire economy since it will affect existing industry in traditional sectors such as food, energy, agriculture, health care, and chemicals. In addition, biotechnology is finding applications in advanced technologies such as materials and electronics.

Entire new markets and unprecedented competitive advantages will be created in the chemical processing industry by the enviro-economic factor. Economic analysis for a new process or product will include full life cycle or "cradle-to-grave" responsibility for all products and processes. Because of the drastically increased cost of waste treatment and disposal, waste management is becoming an integral part of the conception and development of new processes; a technological edge developed in this area could translate directly into a significant economic advantage in process innovation.

A recent DuPont study estimates that implementation of improved process control methods alone would result in savings of $200-500 million per year for the company. A one percent savings due to improved process control translates to a cost reduction of about $2.5 billion for the chemical process industry, which would significantly strengthen their competitive position in the global world market. Those companies that produce new products and processes with minimal overall environmental impact will achieve substantial economic leverage in the international marketplace.

Costs and Benefits:

With funding of $3,000,000 requested per year, NIST will initiate major projects that will provide near-term and long-term benefits to critical technologies in U.S. industry. Examples of expected outputs from planned work include:

During the first year, methods to chemically modify membranes used in the separation, isolation, and purification of final products in the bioprocessing industry will be developed to improve specificity and separation properties of these membranes. This effort will have an immediate impact on the reduction of waste in the specialty chemical and pharmaceutical industries, and will lead to increased productivity.

Projects will also be initiated that will strengthen the global competitiveness of U.S. industry by enhancing the processing yields through highly efficient operations during all phases of manufacturing and processing. In the first phase of this work, technology will be developed to couple multi-element sensing arrays with pattern recognition techniques derived from neural network methods. The next phase will apply state-of-the-art optical technologies, including Fourier Transform-Infrared Spectroscopy, to the challenge of accurate, on-line chemical analysis and measurements of temperature. This will enable the chemical process industry to initiate the conversion from the current mode of final product monitoring to the more efficient and environmentally sound practice of process monitoring, by providing novel, small and rapid sensors for real-time, on-line, in-situ process monitoring of complex chemical reactions.

An additional thrust will directly impact the biotechnology industry by providing the necessary theoretical basis for predictive modelling for efficient separation and purification of biotechnology products by accurately determining the transport (thermodynamic and kinetic) properties of biosystems using light scattering methods. This modelling is vital for rapid movement from technology development to the marketplace during the industry's scale-up from the research laboratory through the pilot plant stage to full-scale production by providing design engineers with the necessary tools to custom design separation, purification and other processes according to scientific principles, rather than the current empirical, trial and error methods.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Chemical science and technology
Subactivity: Chemical science and technology
Investment Program: Biotechnology and chemical processing

Title		Grade	Number	Annual Salary	Total Salaries
Chemical engineer		15	1	$66,609	$66,609
Research chemist		15	3	66,609	199,827
Chemical engineer		14	1	56,627	56,627
Physicist		14	1	56,627	56,627
Research chemist		14	3	56,627	169,881
Bioelectrical engineer		13	1	47,920	47,920
Chemical engineer		13	2	47,920	95,840
Research chemist		13	3	47,920	143,760
Chemical engineer		12	2	41,641	83,282
Technician		11	3	33,623	100,869
Administrative/technical support		9	3	27,789	83,367
Technician		9	2	27,789	55,578
Secretary		5	1	20,173	20,173
Subtotal			26		1,180,360
Less lapse	25 %		(7)		(295,090)
Total full-time permanent (FTE)			19		885,270

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	19
Authorized Positions:	
Full-time permanent	26

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Chemical science and technology
Subactivity: Chemical science and technology
Investment Program: Biotechnology and chemical processing

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full–time permanent	$885	$885
11.9	Total personnel compensation	885	885
12.1	Civilian personnel benefits	257	257
21	Travel and transportation of persons	62	62
22	Transportation of things	54	54
23.3	Communications, utilities and miscellaneous charges	231	231
24	Printing and reproduction	8	8
25.2	Other services	926	926
26	Supplies and materials	167	167
31	Equipment	45	45
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	2,635	2,635
	Transfer to NIST Working Capital Fund		365
	Total increase requested		3,000

Chemical Science and Technology
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$3,897	$3,319	$2,532
Army	361	795	820
Navy	267	779	850
Other	407	472	486
Subtotal, Department of Defense	4,932	5,365	4,688
Department of Commerce	450	370	375
Department of Justice	117	27	28
Department of Energy	2,231	2,222	1,946
Environmental Protection Agency	1,059	1,261	1,296
Department of Health and Human Services	468	626	633
Department of Housing and Urban Development	88	0	0
National Science Foundation	14	0	0
National Aeronautics and Space Administration	1,478	1,355	1,399
Department of Transportation	10	0	0
Other	121	112	23
Total, Other Agency	10,968	11,338	10,388
Calibrations and Tests	1,307	1,339	1,382
Standard Reference Materials (SRM)	2,345	2,954	3,021
Technical and Advisory Services	2,342	2,448	2,515
Total, Reimbursable Program	16,962	18,079	17,306

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Physics

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount
Physics	Pos./BA	207	$25,470	225	$26,372	223	$26,884	223	$26,884	0	0
	FTE/Obl.	226	25,561	240	26,482	240	26,884	240	26,884	0	0

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Physics

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount
Physics										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	98	$13,350	95	$13,845	94	$14,135	74	$13,535	(20)	($600)
Total	98	13,350	95	13,845	94	14,135	74	13,535	(20)	(600)

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
PHYSICS PROGRAM

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes. The Physics program achieves these goals by developing new physical standards, measurement methods and reference data and pursuing long-term, basic and applied research directed toward the needs of industry and the Nation. The Program transfers physical standards, measurement methods and data to the technical community through collaborations, visiting scientist programs, measurement services, workshops, membership on standards and other technical committees, publications, and seminars.

Base Program

NIST investigates the structure and dynamics of atoms and molecules, singly and in aggregate, and establishes measurement methods and standards for infrared, visible, ultra-violet, x-ray, gamma-ray, electron, and neutron radiation. The Program is characterized by strong coupling between basic physics and advances in measurement technology; as such it applies state-of-the-art measurement methods to tests of the fundamental postulates of physics as well as to the development of advanced technologies.

NIST develops and disseminates national standards for time and frequency to meet critical industrial needs in communications (carrier frequency calibration, synchronization of data transmissions), electrical power (power flow monitoring, fault analysis), transportation (air traffic control, railroads, traffic lights), navigation and position location (celestial navigation, oil exploration), as well as for standards laboratories and many military applications.

NIST generates, evaluates, compiles and disseminates atomic, molecular, optical, and ionizing-radiation data in response to major national demands in areas such as defense, energy, environment, space, health, lighting, microelectronics, radiation, and transportation. Industry, universities and other government agencies need this data to address specific problems in fusion plasma diagnostics, laser development, laser processes, radiation chemistry, chemical kinetics, atmospheric chemistry, x-ray lithography, surface magnetism, and materials science.

This NIST program conducts the kind of long-term, high risk research that industry is hard-pressed to support, despite the universal agreement that a strong research base is essential to technical innovation and the survival of our high technology industries. The results of the Physics program are transferred to the technical community through publications, measurement and consulting services, and new measurement methods that can be applied to developing improved, high quality products and processes.

FY 1993 operating objectives include the following:

- Develop measurement techniques and standards for determining the molecular structure of reactive complexes near the mid-point of chemical reactions to improve understanding of how chemical reactions proceed and how they might be controlled.

- Develop new x-ray and gamma-ray probes based on perfect crystal optics and advanced interferometric metrology for investigating microperiodic structures in materials and their influence on materials properties.

- Develop a prototype mercury-ion frequency standard operating in the microwave region to be used as a reference in determining the absolute stability of the NIST time scale.

- Develop new laser and nonlinear optical techniques to advance sensitivity in optical measurements as required for enhanced detection of trace elements, more secure communications, ultrasensitive laser spectroscopy, advanced optical and microwave frequency control, and fundamental physical measurements.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	17	20	20	20	20	20
- number of new CRADAs signed	4	4	4	4	4	4
- number of research associates and other guest researchers	150	151	151	151	151	151
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	100	100	100	100	100	100
- Predictive Models						
-- number of predictive models under development	15	15	15	15	15	15
-- number of predictive models completed	5	5	5	5	5	5
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	14	14	14	14	14	14
-- number of new SRM's introduced	3	2	2	2	2	2
- Calibrations						
-- number of calibrations/tests performed	800	800	800	800	800	800

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Physics
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$1,897	$1,954	$2,013
Army	968	997	1,027
Navy	1,028	1,059	1,091
Other	1,884	1,941	1,399
Subtotal, Department of Defense	5,777	5,951	5,530
Department of Commerce	111	114	117
Federal Emergency Management Agency	10	10	10
Department of Energy	1,975	2,034	2,095
Environmental Protection Agency	49	50	52
Department of Health and Human Services	324	334	344
National Aeronautics and Space Administration	1,882	1,938	1,996
Nuclear Regulatory Commission	342	352	363
Department of Transportation	127	227	107
Total, Other Agency	10,597	11,010	10,614
Calibrations and Tests	737	759	782
Standard Reference Materials(SRM)	214	220	227
Technical and Advisory Services	1,802	1,856	1,912
Total, Reimbursable Program	13,350	13,845	13,535

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Materials science and engineering

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Materials science and engineering	Pos./BA	234	$27,678	290	$35,568	287	$40,636	348	$47,236	61	$6,600
	FTE/Obl.	256	27,170	309	39,935	309	40,636	355	46,586	46	5,950

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Materials science and engineering

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Materials science and engineering										
WCF transfers	0	0	0	0	0	0	0	$650	0	$650
Reimbursable FTE/Obl	150	$15,499	143	$15,567	143	$14,400	97	13,040	(46)	(1,360)
Total	150	15,499	143	15,567	143	14,400	97	13,690	(46)	(710)

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
MATERIALS SCIENCE AND ENGINEERING

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin U.S. commerce, technological progress, improved product reliability, and manufacturing processes. The Materials Science and Engineering (MSEL) subactivity achieves these goals by addressing the scientific, measurement data, and standards issues that are crucial to industry's success in exploiting the potential technological advantages of advanced materials. This subactivity also contributes to the development of in-process sensors and process technologies which control the transformation of these materials from laboratory curiosities to viable products and to manufacturing processes that consistently yield high quality products at reasonable costs. MSEL's research programs are built around several continuous activities designed to identify and address industry's most pressing needs and transfer NIST-developed technology to industry quickly and effectively, including joint research, consortia, the Guest Researcher program, access to unique NIST facilities, memberships on standards committees, publications, conferences, seminars, workshops, and CRADAs (Cooperative R&D Agreements).

Base Program

Technological progress in such diverse fields as communications, construction, energy, and transportation hinge on the development of advanced materials with property and performance characteristics far superior to materials used today. The technological and economic goals of many countries are tied to advances in materials, setting the stage for intense international competition. Annual U.S. shipments of advanced materials and products made from them are currently valued in excess of $70 billion.

Recent advances in the development of advanced ceramics, metals, polymers, composites, and the new high temperature superconductors, as well as advanced processing technology for all of these materials, have revealed a few of the future technological possibilities. Examples of these technologies include the ability to microengineer materials to create structures and combinations of elements unknown in nature with properties and phenomena that were until recently unachievable. The challenge is to transform these materials from laboratory curiosities to viable products and manufacturing processes.

NIST is responding to this challenge by addressing the scientific and measurement issues that are crucial to industry's success in exploiting the potential technological advantages of advanced materials. The greatest barrier to industrial utilization of these advanced materials is the lack of process technologies which consistently yield high quality products at reasonable cost. The NIST materials program, carried out in MSEL, emphasizes research leading to the development of standards, test methods, reference data and materials, and a scientific understanding of the underlying chemical and physical basis of materials processing, properties, and performance. The FY 1994 Materials Science and Engineering base includes funding for operation of the Cold Neutron Research Facility.

FY 1994 base program operating objectives include the following:

- Improve the process model for polymer injection molding by providing improved flow and structural properties data.

- Establish the feasibility of utilizing capacitance probes, ultrasonic sensors, and microwaves to monitor the sintering of ceramics. Initiate research to improve the understanding of the relationship of process variables to ceramic consolidation and sintering.

- Develop process sensors to measure and control substrate materials chemistry during manufacturing to improve the reproducibility and reliability of performance properties of these materials for printed wire board (PWB) applications. Develop techniques for assessing performance limits of connectors and conductors based on current PWB manufacturing technology and next generation processes and products.

- Develop analysis techniques for critical feedstock and fabrication parameters needed to improve the processing of materials coatings for greater consistency in material properties such as fatigue resistance, wear behavior, and elevated-temperature strength. Relate processing parameters to material microstructure, coating/component interface properties, and the properties of the component structure.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	63	75	75	75	75	75
- number of new CRADAs signed	23	23	23	23	23	23
- number research associates and other guest researchers	546	551	551	551	551	551
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	40	45	45	45	45	45
- Predictive Models						
-- number of predictive models under development	16	18	18	18	18	18
-- number of predictive models completed	2	2	2	2	2	2
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	7	6	6	6	6	6
-- number of new SRM's introduced	5	5	5	5	5	5

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Materials science and engineering	Pos./BA	287	$40,636	348	$47,236	61	$6,600
	FTE/Obl.	309	40,636	355	46,586	46	5,950

Investment Program: Advanced Materials and Processing (61 Permanent positions, BA +$6,600,000, Direct Obligations +$5,950,000, Transfer to WCF +$650,000) - This increase will allow NIST to play a major role as the government laboratory participating with industry to bridge the gap between bench scale conception and commercial utilization of advanced materials and advanced processing.

Problem Magnitude and Scope:

While the U.S. continues to lead in basic research in the materials arena, significant gaps exist in the research and development (R&D) required to move these new materials from the laboratory to the marketplace. Many of these gaps have traditionally been filled by producers of commodity materials; however, a number of factors combine to dictate that for advanced materials these gaps in R&D will be filled only by a coordinated effort of materials producers and users aided by the resources which government and universities can bring to bear on this R&D. These gaps are being addressed by our economic competitors using such coordinated programs and resources. As a result, the once universal leadership role of the United States in segments of the materials field is threatened or surpassed by foreign competitors. The Office of Science and Technology Policy (OSTP) and Office of Management and Budget (OMB) recognize the importance of materials technology in providing greater national security, industrial productivity, and economic growth, and have launched a budget crosscut on the Federal effort in materials science and technology. The Federal Coordinating Council for Science, Engineering and Technology's (FCCSET) Committee on Industry and Technology (CIT) coordinated the development of this interagency effort. The analysis of the planning framework, program priorities, and budget options developed by the study led to a new Advanced Materials and Processing Program (AMPP).

Why NIST:

As the only government laboratory with the mission to serve industry, NIST has developed a strategy which involves industry in every stage of the R&D program from planning through execution, to ensure that the technology developed is relevant to industrial needs and to ensure that it is readily transferred to industry. Additionally, NIST has a broad technical base in materials science and technology in MSEL, including strong programs in metals, ceramics, and polymers. By coupling the resources of MSEL with those of other NIST laboratories, NIST is in a position to address the widest range of industry needs in the materials field. NIST's traditional strengths in measurement science and its associated role in assembling evaluated databases, development of in-situ sensors, and new test methodologies make NIST a critical participant in any program designed to achieve industrial implementation of advanced materials.

Description of the Proposed NIST Technical Program:

The proposed NIST program builds on existing strengths in metals, ceramics, polymers, organic matrix composites, and cementitious materials and extends the areas of technical coverage to include:

- Synthesis and Processing of Advanced Materials
- Materials Process Integration.

The NIST programs are focused on major priority areas singled out by the AMPP and emphasize applied and process integration aspects of synthesis and processing, as well as measurement science/characterization of relevant materials. The synthesis and processing program will develop a theoretical and computational distributed center of excellence in cooperation with U.S. industry for solving critical processing, characterization, and fundamental issues of advanced materials; an effort closely coupled to NIST's thrust in intelligent processing of materials and focusing on process models, advanced on-line sensors, and expert systems for process control. The program will further assist industry efforts to identify scalable manufacturing technologies for nanostructured materials, a new class of advanced materials with potential applications in impact areas such as energy, information/communications, and aerospace. The process integration program will address the step of readying the material or process for introduction into industrial application through integration of materials with design and manufacturing requirements by linking design and data, process optimization, fabrication, and testing. The program will initiate R&D in high performance construction materials for rebuilding America's infrastructure and in layered ceramic coatings for abusive service conditions and the cost-effective life extension of existing components. In support of the FCCSET priority of developing an integrated Federal R&D program through Presidential budget initiatives such as the AMPP, NIST has already initiated coordinated activities with other Federal agencies in some of the proposed new program areas, or has identified additional Federal programs for the development of future coordinated activities that complement the NIST effort. NIST has worked closely with DARPA in the extension of the concepts of intelligent processing of materials to the consolidation of advanced alloys for high performance applications.

Economic Impacts:

Advanced materials have been identified as one of the emerging technologies in the DoC report entitled, "The Emerging Technologies, a Survey of Technical and Economic Opportunities," issued in the Spring of 1990, and in every study on critical technologies by government and private sector organizations. Estimates of the aggregate economic value of advanced materials range widely but sales may reach $100 billion in the first decade of the next century. Advanced materials are often the enabling technology without which advances in other manufacturing technologies cannot be implemented. Thus, the economic and societal impact of such materials may only be properly judged by recognizing that leadership in advanced materials technology is a prerequisite to leadership in many other critical technological areas.

Costs and Benefits:

With funding of $6,600,000 requested per year, NIST will provide both near-term and long-term results of benefit to industry.

For the past 40 years the United States has been the world industrial leader, due to its dominant position in science and technology, particularly in materials science and engineering. During the past decade this position has been rapidly eroding as Western Europe and Japan have assumed an aggressive role in technology development, both for domestic and export markets. In many areas, including materials, these nations now are fully competitive, and in some cases, surpassing the United States. There is a strong commitment to industrial growth by all major competitor nations, stimulated by coordinated R&D in which materials science and engineering is a featured element. Indeed, of all industrial areas in which growth is anticipated for the next decade, materials science and technology ranks along with biotechnologies and computers/information as targeted by all nations sampled.

The proposed program ranges from basic to applied developmental work. Industrial benefits from test method development and database development can be expected to begin within one to two years from program inception. Materials performance prediction capabilities, design and safety criteria, and standardization would follow in two to four years. In other areas such as the application of new, theoretical and computational methodologies to critical technical issues in the synthesis, processing, and characterization of advanced materials, longer term benefits are more likely with development of a new paradigm of inter-institutional cooperation using electronic data transfer.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and engineering research and standards
Subactivity: Materials science and engineering
Investment Program: Advanced materials and processing

Title	Grade	Number	Annual Salary	Total Salaries
Ceramics engineer	15	1	$66,609	$66,609
Materials scientist	15	2	66,609	133,218
Mathematician	15	1	66,609	66,609
Metallurgist	15	3	66,609	199,827
Physical scientist	15	1	66,609	66,609
Research chemist	15	1	66,609	66,609
Ceramics engineer	14	1	56,627	56,627
Chemist	14	1	56,627	56,627
Computer scientist	14	1	56,627	56,627
Economist	14	1	56,627	56,627
Materials engineer	14	1	56,627	56,627
Materials scientist	14	3	56,627	169,881
Metallurgist	14	1	56,627	56,627
Physical scientist	14	1	56,627	56,627
Physicist	14	2	56,627	113,254
Chemist	13	1	47,920	47,920
General engineer	13	1	47,920	47,920
Materials scientist	13	3	47,920	143,760
Mathematician	13	1	47,920	47,920
Mechanical engineer	13	1	47,920	47,920
Metallurgist	13	1	47,920	47,920
Physicist	13	2	47,920	95,840

Title		Grade	Number	Annual Salary	Total Salaries
Research structural engineer		13	1	47,920	47,920
Chemical engineer		12	1	41,641	41,641
General engineer		12	1	41,641	41,641
Materials scientist		12	1	40,298	40,298
Mechanical engineer		12	1	41,641	41,641
Physicist		12	1	40,298	40,298
Computer scientist		11	1	33,623	33,623
Technician		11	1	33,623	33,623
Engineering technician		10	1	30,603	30,603
Administrative/technical support		9	6	27,789	166,734
Computer scientist		9	1	32,419	32,419
Technician		9	4	27,789	111,156
Technician		8	1	25,159	25,159
Engineering technician		7	1	22,717	22,717
Technician		7	2	22,717	45,434
Secretary		6	3	21,805	65,415
Secretary		5	1	20,173	20,173
Secretary		4	1	18,577	18,577
Clerk		3	1	14,603	14,603
Subtotal			61		2,631,880
Less lapse	25 %		(15)		(657,970)
Total full–time permanent (FTE)			46		1,973,910

Personnel Data	
Full–Time Equivalent Employment:	
Full–time permanent	46
Authorized Positions:	
Full–time permanent	61

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Measurement and engineering research and standards
Subactivity: Materials science and engineering
Investment Program: Advanced materials and processing

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full–time permanent	$1,974	$1,974
11.9	Total personnel compensation	1,974	1,974
12.1	Civilian personnel benefits	572	572
21	Travel and transportation of persons	337	337
22	Transportation of things	96	96
23.3	Communications, utilities and miscellaneous charges	842	842
24	Printing and reproduction	58	58
25.2	Other services	1,619	1,619
26	Supplies and materials	356	356
31	Equipment	96	96
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	5,950	5,950
	Transfer to NIST Working Capital Fund		650
	Total increase requested		6,600

Materials Science and Engineering
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$261	$350	$207
Army	432	607	484
Navy	1,964	1,214	1,240
Other	2,419	2,209	1,175
Subtotal, Department of Defense	5,076	4,380	3,106
Department of Agriculture	16	0	0
Department of Commerce	50	0	0
Department of Justice	55	50	50
Department of Energy	2,004	3,314	2,479
General Services Administration	117	129	120
Department of Health and Human Services	544	749	665
Department of the Interior	27	30	30
National Science Foundation	1,232	970	970
National Aeronautics and Space Administration	1,094	941	746
Nuclear Regulatory Commission	15	0	0
Department of State	118	125	125
Department of Transportation	508	410	390
Other	2,064	1,943	1,853
Total, Other Agency	12,920	13,041	10,534
Standard Reference Materials(SRM)	818	843	868
Technical and Advisory Services	1,761	1,683	1,638
Total, Reimbursable Program	15,499	15,567	13,040

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Building and fire research

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount
Building and fire research	Pos./BA	101	$10,983	113	$12,070	113	$12,873	113	$12,873	0	0
	FTE/Obl.	111	11,044	119	12,091	121	12,873	121	12,873	0	0

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Building and fire research

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Building and fire research										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	125	$11,403	121	$11,887	120	$12,245	105	$11,795	(15)	($450)
Total	125	11,403	121	11,887	120	12,245	105	11,795	(15)	(450)

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
BUILDING AND FIRE RESEARCH

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin U.S. commerce, technological progress, improved product reliability, and manufacturing processes. The Building and Fire Research subactivity reaches these goals by providing pre-competitive and supporting/enabling technologies in which industry typically under invests because of inability to capture sufficient returns, and for which NIST has specialized facilities and expertise. The program is built around several continuous activities which are designed to identify industry's most pressing needs and transfer NIST-developed technology to industry quickly and effectively through mechanisms including joint research, the Research Associate Program, memberships on standards committees, publications, conferences, seminars, workshops, and CRADAs (Cooperative R&D Agreements).

Base Program

The Building and Fire Research Laboratory conducts nationally recognized programs in major aspects of construction and fire research.

The building research program works cooperatively with other public and private organizations to improve the usefulness, safety and economy of constructed facilities, and increase the productivity and international competitiveness of the construction industry. It develops technologies to predict, measure, and test the performance of construction materials, components, systems and practices. Its programs include structural engineering, materials, mechanical and environmental systems, and computer integrated construction. In the National Earthquake Hazards Reduction Program, established in response to the Earthquake Hazards Reduction Act of 1977, NIST is the principal agency for research and development to improve building codes and standards and practices for structures and lifelines. NIST studies the emerging concept of green buildings to meet users' needs and exploit the most advanced thinking in design and engineering while using energy efficient and environmentally sound processes and materials.

The Building and Fire Research Laboratory also is the foremost fire research laboratory in the United States. The fire research program was established by the Federal Fire Prevention and Control Act of 1974 to reduce the human and economic costs of unwanted fires by providing scientific and technical knowledge on all aspects of fire for the fire protection community. It investigates the scientific principles that govern the phenomena of fire, provides the knowledge base for fire safety, develops the underlying technical support for new safety standards, and generates the engineering methodology to support the practice of fire protection engineering. The fire research program is designed to provide fire protection engineers, fire investigators, fire service organizations, product manufacturers, state and local officials, standards developers, fire safety educators, and fire researchers the methods of measuring the fire properties of materials, such as ignitability, rate of heat release, flame spread, smoke, and toxicity; engineering tools; and predictive methods to assess the adequacy of performance of fire protection features. These methods will be increasingly used in code equivalency to reduce costs of fire safety, fire investigation, and litigation.

Construction is one of the Nation's largest industries. In 1991, new construction put in place amounted to $415 billion, and provided employment to 6.3 million people. Constructed facilities shelter and support most human activities. Their quality affects the competitiveness of U.S. industry and the safety and quality of life of all people. The U.S. fire loss record of over 5000 fire deaths, 126,000 injuries, and $9 billion in direct costs annually is among the worst in the world. The total cost of fire is increasing in real terms, burdening the economy at $128 billion per year.

Construction and fire safety comprise a giant, but disaggregated industry with small enterprises predominating. Private sector research is limited to development of proprietary products. Shortages of capital for R&D, inadequate interfaces among diverse products and practices, liability concerns, and regulations are barriers to innovation. The NIST program removes technological market barriers and reduces burdens of unnecessary or ineffective regulations while maintaining essential levels of safety. Private sector R&D are stimulated by this program's authoritative, nonprescriptive performance measures for construction and fire safety of materials, components, systems, and practices. It is the principal source of technical information for construction and fire safety standards, which, in turn, are widely used in fire and building codes.

FY 1994 base program operating objectives include the following:

o Develop guidelines for improving soils susceptible to liquefaction. Guidelines are needed to prevent large ground displacements associated with liquefaction which are the primary cause for failure of buried lifeline systems during earthquakes.

o Develop a recommended practice for predicting the service lives of protective coatings for steel. The method is needed to aid the evaluation of new coatings which are being formulated in response to increasingly stringent environmental regulations.

o Develop measurement procedures and associated software techniques for fault detection and diagnostics of large building heating, ventilating, and air conditioning systems. They will be incorporated by manufacturers into smart control systems for making real-time control decisions for green buildings.

o Develop a method of predicting smoke movement in large rooms. This will extend the capabilities of fire hazard analysis tools used by fire protection engineers to address fires in large buildings.

- Develop a catalog of candidate fire signatures for reliable sensing of small fires. This will potentiate the development of new detectors that will not false alarm, but will alert people before a fire grows to property- and life-threatening size.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia and government (CRADAs)	10	12	12	12	12	12
- number of new CRADAs signed	3	3	3	3	3	3
- number of research associates and other guest researchers	80	81	81	81	81	81
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	14	14	14	14	14	14
- Predictive Models						
-- number of predictive models under development	14	14	14	14	14	14
-- number of predictive models completed	6	6	6	6	6	6
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	1	1	1	1	1	1
- Calibrations						
-- number of calibrations/tests performed	4	4	4	4	4	4

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Building and Fire Research
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$946	$974	$1,003
Army	43	400	412
Navy	585	603	621
Other	489	225	232
Subtotal, Department of Defense	2,063	2,202	2,268
Department of Agriculture	39	40	41
Consumer Product Safety Commission	639	400	412
Federal Emergency Management Agency	908	550	567
Department of Energy	2,120	2,650	2,280
Environmental Protection Agency	95	300	309
General Services Administration	543	750	773
Department of Health and Human Services	36	37	38
Department of Housing and Urban Development	278	286	295
Department of the Interior	942	970	999
National Aeronautics and Space Administration	284	292	300
Nuclear Regulatory Commission	482	525	541
Department of Transportation	779	625	644
Other	70	72	74
Total, Other Agency	9,278	9,699	9,541
Calibrations and Tests	1	1	1
Technical and Advisory Services	2,124	2,187	2,253
Total, Reimbursable Program	11,403	11,887	11,795

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Computer systems

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Computer systems	Pos./BA	127	$11,797	140	$12,141	138	$13,080	338	$37,080	200	$24,000
	FTE/Obl.	140	11,652	148	12,463	148	13,080	321	33,225	173	20,145

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund

PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Computer systems

Line Item	1992 Actual Personnel	1992 Actual Amount	1993 Currently Available Personnel	1993 Currently Available Amount	1994 Base Personnel	1994 Base Amount	1994 Estimate Personnel	1994 Estimate Amount	Increase/ (Decrease) Over 1994 Base Personnel	Increase/ (Decrease) Over 1994 Base Amount
Computer systems										
WCF transfers	0	0	0	0	0	0	0	$3,855	0	$3,855
Reimbursable FTE/Obl	189	$18,197	183	$18,744	183	$19,307	142	18,147	(41)	(1,160)
Total	189	18,197	183	18,744	183	19,307	142	22,002	(41)	2,695

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
COMPUTER SYSTEMS

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin U.S. commerce, technological progress, improved product reliability, and manufacturing processes. The Computer Systems Laboratory (CSL) provides leadership and research in the development of voluntary national and international standards and conformance tests for computers and telecommunication systems, by assisting in the writing of specifications and leading standards development activities. CSL supports "open" computer system architectures that integrate different standards and accelerate the adoption of new information technologies. Providing technical guidance to private industry and the Federal government, participating in standards development, fostering implementation agreements among vendors, and developing conformance tests are some of the activities contributing to these goals.

Base Program

Through this subactivity, carried out in CSL, NIST conducts research and provides technical support to Federal agencies and to industry in the effective use of computers and related telecommunication systems. NIST efforts include: (1) development and issuance of Federal Information Processing Standards (FIPS) and Guidelines necessary to ensure the efficient and effective acquisition, management, security, and use of information technology by the Federal Government and to preserve the competitive options of American industry in the development of computer and related telecommunication products and services; (2) promotion of the use of FIPS and Guidelines in order to reduce waste, error, and unnecessary duplication in the application of computer systems in the Federal Government; and (3) development of critically needed methods to protect information resources in distributed computer and telecommunications systems.

This subactivity affects both the industry and the users of computers and related telecommunication systems. The U.S. computer and related telecommunications industries have sales of at least $100 billion per year and maintain a positive trade balance. International competition is becoming increasingly intense. Innovations in computer hardware, software, and digital communications will challenge managers to apply new technology for productivity increases throughout the American economy in the coming years and will have pervasive effects on industry structure and performance as well as on the quality of government services. Since computers will be distributed throughout the workplace and used generally throughout government and the economy, computer integration, performance assurance, and security will become even more important.

The merging of computer and telecommunications technology heightens the importance of an integrated approach to standards development for computer and related telecommunications systems. As the technology changes, it will be essential to find ways to enable organizations to preserve their investments in applications systems, to upgrade existing systems, and to improve the portability of staff skills, data, and software.

FY 1994 operating objectives include the following:

- Develop standard formats and protocols needed for public key cryptography to provide data confidentiality, key distribution, and digital signature services in government and industry electronic commerce applications. These standards will enable government and industry to protect business transactions against loss of confidentiality and integrity of data.

- Develop guidance documents for defining security targets, functionality classes and assurance profiles for information technology (IT) systems. This guidance will enable federal agencies to specify the security requirements to be met by their IT systems and the level of assurance to be achieved so that the system meets the specified requirements, and only those requirements.

- Develop specifications and associated guidance for Federal agencies for incorporating object-oriented technology into the next revision of the Standard Query Language (SQL). This will enable the efficient description and management of complex databases, such as descriptions of manufactured products and geographic data.

- Develop methodologies, processes, and associated organizational structures to support the development of Open System Environment (OSE) profiles, and develop standards and guidance on their selection and use. An Open System interconnects systems from different vendors and provides portability of application software and skills required to design and implement them.

- Provide a commercial platform to develop a standard national specification for ISDN, together with the related application profiles and tests. These will permit electronic business transactions to be accomplished in a transparent manner, thereby enhancing the U.S. competitive posture.

- Develop Government Open Systems Interconnection Profile (GOSIP) Version 4.0 as a Federal Information Processing Standard (FIPS). Open Systems Interconnection (OSI) protocols provide for ease of communication between different computers interconnected through networks.

- Develop methods to evaluate the logical correctness and performance of dynamic routing protocols. The methods and tools developed will assure compliance with OSI routing protocols, enhancing interoperability of OSI networks. Thus, production costs for product suppliers will be reduced, products will enter the market earlier, and prices to end users will be reduced.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative research projects in progress with industry, academia, and government (CRADAs)	64	77	77	77	77	77
- number of new CRADAs signed	28	28	28	28	28	28
- number of research associates and other guest researchers	32	33	33	33	33	33
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	42	15	15	15	15	15
Products/Services						
- Standard Reference Materials						
-- number of reference materials under development	3	3	3	3	3	3
-- number of new SRM's introduced	1	1	1	1	1	1

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Computer systems	Pos./BA	138	$13,080	338	$37,080	200	$24,000
	FTE/Obl.	148	13,080	321	33,225	173	20,145

Investment Program: HPCC/Information Infrastructure (200 Permanent positions, BA +$24,000,000, Direct Obligations +$20,145,000, Transfer to WCF +$3,855,000) - This request will enable NIST to expand and integrate its programs in computer performance measurement, communications protocols, advanced software and advanced manufacturing applications R&D, and the development of the National Research and Education Network (NREN). This program is part of the multi-agency High Performance Computing and Communications program as described in the High Performance Computing Act of 1991 and the Information Infrastructure and Technology Act of 1992 introduced by former Senator Gore. The latter is currently incorporated in S.4, the National Competitiveness Act of 1993.

Efficient access to information is becoming critical for all parts of the American economy. Banks, insurance companies, manufacturing concerns, and many business operations depend on high-speed communication links. These systems must be reliable, easy to use, and inexpensive. The objectives of the NIST program are: (1) to accelerate the development and deployment of high performance computing and networking technologies required for the national information infrastructure and (2) to work with industry to ensure these technologies in a manufacturing environment. Working closely with industry, and building on its leadership in research, standards development, measurement technology and technology transfer in both information technology and manufacturing, NIST will utilize a test facility to enable the accelerated application of information technologies to manufacturing to accomplish this objective. Success of this deployment will be measured by the ability of U.S. industry to commercialize and penetrate markets with these technologies.

Problem Magnitude and Scope:

High-performance computing, networking technologies and advanced manufacturing are arenas of intense R&D and international competition to establish global leadership in the base technologies and to establish international markets. In each arena, U.S. industry is being challenged by Japan and the European Community. High-performance computing and networking are generic technologies which enable advances in the physical sciences and industrial applications. Significant advances in numerous scientific and engineering areas depend upon harnessing these new high-performance technologies. Broadband Integrated Services Digital Network (ISDN) and Open Systems Interconnection (OSI) protocol standards are technologies which enable the development and deployment of high-performance, commercial communications networks which are required for industry and government to conduct business and communicate effectively. However, since the NREN does not currently employ these standards, many Government agencies are precluded from effectively communicating with parts of their clientele, unless they deploy nonstandard technologies. High performance computer systems pose significant challenges in harnessing the hardware; required are advanced software technologies and algorithms designed to scale in proportion to the problem size simply by increasing the number of processing elements. There is very limited experience in developing scalable software and algorithms to control and utilize these new high-performance computer systems.

U. S. manufacturing still trails its competitors in its adoption of computer integrated advanced manufacturing. To increase their competitiveness, U.S. manufacturers are seeking to increase product quality, lower costs of production, and increase the speed with which they can bring innovation to market. They are doing so by introducing advanced manufacturing technologies, most often computer-based. These include design technologies, coming to be known by terms such as agile manufacturing and concurrent engineering. Accompanying introduction of these technologies are a host of challenges specific to industries and technologies which are associated with achieving standards-based compatibility of systems.

Why NIST:

As a science and technology based organization, NIST programs focus on leading edge science and engineering problems and the resulting computing applications which require the most sophisticated computers and software available. Consequently, NIST has considerable experience in the R&D of advanced software technology and algorithms for mathematical, scientific and engineering applications. NIST has world-class expertise in instrumentation and performance measurement methodology for high performance computing systems, computer networking and telecommunications standards. NIST needs to contribute to the development of new computing and communications technologies, to establish relevant new standards and metrology, and to support critical industries and technologies upon which national competitiveness relies. Both the President's High Performance Computing and Communications (HPCC) Program and the High Performance Computing Act of 1991 assign key roles and specific responsibilities to NIST which are reflected in the technical program described below.

Description of the Proposed NIST Technical Program:

NIST proposes to extend and integrate the activities of its HPCC program. For high-performance networking, NIST proposes to utilize its expertise to enable transition planning and deployment of ISDN and OSI-based protocols in the NREN and to extend advanced performance measurement methodology to very high speed communications systems. Due to the complementary nature of their missions and ISDN related efforts, NIST and NTIA continue to collaborate with each other, and with other Federal agencies, in the Federal Networking Council, the North American ISDN Users Forum, standards bodies and other appropriate fora. The scope of collaboration includes standards development, research and policy related issues. For advanced software technology, NIST will develop integrated, scalable vector/parallel software. This effort will focus on the creation, organization and dissemination of application specific software libraries. These libraries will lead to significant improvements in the effectiveness and ease of use of high performance computing systems. Initial application emphasis will include materials characterization and modeling, biotechnology, and advanced automated manufacturing. Dissemination of advanced software technology to industry and academia will be through CRADAs and participation in the National HPCC Program's software repository and exchange activities via R&D related to NIST's Guide to Available Mathematical Software project.

An Advanced Manufacturing Systems and Networking Testbed (AMSANT) will be utilized at NIST to enable research and development into advanced manufacturing computer systems and networking. In addition the AMSANT will: (1) test high performance computer and networking hardware and software to determine their suitability for use within the U.S. manufacturing community; (2) assist industry in the development and implementation of voluntary consensus standards; (3) serve as a demonstration site that industrial technology suppliers and users can use to identify and overcome technical and other barriers leading to the successful and cost-effective implementation of these systems. Specific applications may include enterprise integration, process integration for advanced materials manufacture, integrated product/process design, process modeling, and simulation and virtual manufacturing.

Research and testing will be conducted at the NIST AMSANT as well as at testbed(s) selected under the NIST Advanced Technology Program. These activities will build upon existing laboratory capabilities at NIST to test equipment, software and systems, including development and implementation of strategies to perform the needed mechanical, electronic, electro-optical and optical testing on appropriate network and manufacturing equipment. Techniques to verify the performance and interoperability of software will also be developed, along with system tests to assure functionality, speed, and reliability.

Economic Impacts:

The U.S. Information technology industry is a $370 billion industry; manufacturing contributes $3 trillion to the economy. Each activity in NIST's HPCC Program will enable technology advances within the information technology industry and in manufacturing sectors of the economy. Consequently, each activity has a multiplicative effect on other advances in science, engineering and industry because of the application of computing and communications technologies to other economic sectors. For example, advanced software technology for high performance computing systems will enable more efficient use of these systems; and advanced software technology enables faster market penetration of high-performance computing systems. Use of these systems and advanced software technology enables computer-aided design of drugs and chemical processes, advanced materials, advanced manufacturing processes, and more fuel efficient automobiles and aircraft. Each application area is currently limited by the computational capacity of the most powerful computing systems available, and each is an advanced technology which will help maintain national competitiveness. Collectively, the results of this program will assist U.S. industry in the application of information technologies by establishing performance based test techniques to encourage rapid improvement of the technology, to permit interoperability of hardware and software from various vendors, and to stimulate the export of U.S. products.

Costs and Benefits:

With funding of $24,000,000 requested per year, NIST will provide both near-term and long-term results of benefit to industry. In the first year, NIST will initiate transition planning and deployment of ISDN and OSI protocols on the NREN. NIST will extend Electronic Data Interchange from its current application utilizing text to include the exchange of complex engineering designs and manufacturing information. Also in the first year a manufacturing applications environment will be chosen, and the NIST AMSANT and other manufacturing testbeds will be utilized to evaluate relevant costs and issues associated with providing access to a network of design and manufacturing companies.

During the second year, mature, scalable software will be made more accessible to network users. NIST will also develop the capability with the manufacturing community to represent the complex engineering designs and manufacturing information that is required to communicate between design and manufacturing communities.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and engineering research and standards
Subactivity: Computer systems
Investment Program: HPCC/information infrastructure

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	15	11	$66,609	$732,699
Electrical engineer	15	6	66,609	399,654
Electronics engineer	15	3	66,609	199,827
Mathematician	15	6	66,609	399,654
Mechanical engineer	15	7	66,609	466,263
Physicist	15	3	66,609	199,827
Computer scientist	14	19	56,627	1,075,913
Electrical engineer	14	3	56,627	169,881
Mathematician	14	4	56,627	226,508
Mechanical engineer	14	6	56,627	339,762
Physicist	14	7	56,627	396,389
Computer scientist	13	17	47,920	814,640
Computer specialist	13	13	47,920	622,960
Electrical engineer	13	6	47,920	287,520
Mechanical engineer	13	7	47,920	335,440
Physicist	13	4	47,920	191,680
Computer scientist	12	7	40,298	282,086
Computer specialist	12	5	40,298	201,490
Mechanical engineer	12	2	41,641	83,282
Physicist	12	5	40,298	201,490
Technician	12	6	40,298	241,788

Title		Grade	Number	Annual Salary	Total Salaries
Electronics technician		11	3	33,623	100,869
Technician		11	2	33,623	67,246
Administrative/technical support		9	23	27,789	639,147
Computer technician		9	3	27,789	83,367
Mechanical engineer		9	3	36,123	108,369
Technician		9	5	27,789	138,945
Mechanical engineer		7	2	29,530	59,060
Secretary		5	12	20,173	242,076
Subtotal			200		9,307,832
Less lapse	13 %		(27)		(1,253,139)
Total full-time permanent (FTE)			173		8,054,693
Personnel Data					
Full-Time Equivalent Employment:					
Full-time permanent			173		
Authorized Positions:					
Full-time permanent			200		

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Computer systems
Investment Program: HPCC/information infrastructure

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full–time permanent	$8,055	$8,055
11.9	Total personnel compensation	8,055	8,055
12.1	Civilian personnel benefits	2,335	2,335
21	Travel and transportation of persons	568	568
22	Transportation of things	253	253
23.3	Communications, utilities and miscellaneous charges	1,940	1,940
24	Printing and reproduction	117	117
25.2	Other services	5,386	5,386
26	Supplies and materials	875	875
31	Equipment	616	616
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	20,145	20,145
	Transfer to NIST Working Capital Fund		3,855
	Total increase requested		24,000

Computer Systems
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$1,114	$1,147	$1,181
Army	1,392	1,434	1,477
Navy	453	467	481
Other	8,804	9,068	8,180
Subtotal, Department of Defense	11,763	12,116	11,319
Department of Agriculture	62	64	66
Department of Commerce	560	577	594
Department of Justice	538	554	571
Federal Emergency Management Agency	24	25	26
Department of Education	77	79	81
Department of Energy	18	19	20
Environmental Protection Agency	157	162	167
General Services Administration	982	1,011	1,041
Department of Health and Human Services	278	286	295
Department of the Interior	91	94	97
National Science Foundation	16	16	16
National Aeronautics and Space Administration	22	23	24
Nuclear Regulatory Commission	135	139	143
Postal Service	96	99	102
Department of State	128	132	136
Department of the Treasury	1,575	1,622	1,671
Department of Veterans Affairs	297	306	315
Other	156	161	166
Total, Other Agency	16,975	17,485	16,850
Standard Reference Materials(SRM)	5	5	5
Technical and Advisory Services	1,217	1,254	1,292
Total, Reimbursable Program	18,197	18,744	18,147

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Applied mathematics and scientific computing

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Applied mathematics and scientific computing	Pos./BA	65	$6,490	70	$6,779	70	$7,002	70	$7,002	0	0
	FTE/Obl.	71	6,540	75	6,829	76	7,002	76	7,002	0	0

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Applied mathematics and scientific computing

Line Item	1992 Actual Per–sonnel	1992 Actual Amount	1993 Currently Available Per–sonnel	1993 Currently Available Amount	1994 Base Per–sonnel	1994 Base Amount	1994 Estimate Per–sonnel	1994 Estimate Amount	Increase/ (Decrease) Over 1994 Base Per–sonnel	Increase/ (Decrease) Over 1994 Base Amount
Applied mathematics and scientific computing										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	20	$2,888	19	$3,007	19	$2,351	19	$2,351	0	0
Total	20	2,888	19	3,007	19	2,351	19	2,351	0	0

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
APPLIED MATHEMATICS AND SCIENTIFIC COMPUTING

Goal Statement

The goals of this subactivity are to: 1) enhance the competitiveness of American industry by providing appropriate support for industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy, and 2) provide measurements, calibrations, and quality assurance techniques which underpin U.S. commerce, technological progress, improved product reliability, and manufacturing processes. The Applied Mathematics and Scientific Computing program supports these goals by collaborating with NIST scientists and engineers in theoretical and experimental investigations of emerging technologies that require advanced mathematical, statistical, and computational methods; by conducting joint research with industry, universities and other NIST laboratories; by working with Research Associates and standards committees; and by developing publications, seminars, workshops, conferences, and general-purpose software. Many of these efforts are conducted as integral parts of industrial outreach activities based in other NIST laboratories.

Base Program

The Computing and Applied Mathematics Laboratory ensures that the best and most appropriate techniques in mathematical modeling, statistics, numerical analysis, and scientific computing are made available to, and used by, staff in the NIST laboratory-based programs and their collaborators in industry. The program helps certify the accuracy and integrity of NIST technical data and helps validate NIST scientific experiments and measurement services.

The program has a substantial impact on the efficiency and productivity of all NIST laboratory-based programs and their interactions with users of NIST services. Unique statistical methods developed in the program provide essential assurance that NIST technical projects produce results which are both accurate and well-documented. Specialized techniques in numerical analysis and mathematical modeling allow NIST scientists and engineers to exploit theoretical and experimental developments at the forefront of science and technology. Expertise in scientific computing enables technology-driven improvements in computer hardware and software to be incorporated into the advanced scientific computing environment at NIST. The maintenance of this environment by the Applied Mathematics and Scientific Computing program provides for more efficient use of computers for data acquisition, analysis, computations, and management services, and provides access to modern techniques of computer graphics and scientific visualization.

Direct involvement with Institute programs allows NIST mathematicians, computer scientists, and statisticians to identify needs common to many application areas and to develop special tools and methods to meet these needs. These include, for example, systems for the classification and management of general-purpose mathematical software that are used nationwide at supercomputer centers that serve scientific and engineering research laboratories and are used in the President's HPCC initiative.

Advanced mathematical modeling techniques for highly nonlinear partial differential equations with moving boundaries have been developed and are crucial for the analysis, characterization, and evaluation of semiconductor materials and advanced composites.

The basic mathematical capabilities developed under this program enhance NIST services to industry and other government agencies, provided in partnership with other NIST technical groups. For example, this program's expertise in mathematical modeling of physical systems and computer graphics contributes to a joint NASA/NIST program to study the effects of time-dependent gravitational variations of importance to microgravity experiments in orbiting spacecraft.

FY 1994 operating objectives include the following:

o Develop a highly efficient and robust geometric measurement for the on-line control of optical fiber quality.

o Develop improved procedures and algorithms for the non-destructive evaluation of materials using cold neutron imaging.

o Develop fast, efficient and stable algorithms for image enhancement. Applications of such procedures include digital imaging techniques for nondestructive evaluation and recovery of results from medical x-ray images obtained with reduced x-ray intensity.

o Investigate and develop analytical techniques for nonlinear dynamical systems, especially chaotic phenomena. Applications include the understanding of strain-localization in materials at low temperatures, important in engineering testing; and the dynamics of fast electronic switches of interest to the microelectronics industry.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of cooperative reserach projects in progress with Industry, academia, and government (CRADAs)	1	2	2	2	2	2
- number of new CRADA's signed	2	2	2	2	2	2
- number of research associates and other guest researchers	9	9	9	9	9	9
Research Output						
- Methods/Standards						
-- number of new measurement methods/standards under development	3	2	2	2	2	2
- Predictive Models						
-- number of predictive models under development	30	31	31	31	31	31
-- number of predictive models completed	12	14	14	14	14	14

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Applied Mathematics and Scientific Computing
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Army	$12	$12	$13
Navy	0	105	105
Other	1,490	1,673	995
Subtotal, Department of Defense	1,502	1,790	1,113
Department of Agriculture	19	6	6
Department of Commerce	823	650	670
Department of Justice	2	0	0
Department of Energy	247	254	262
General Services Administration	50	70	70
Department of Health and Human Services	69	87	80
Department of the Treasury	72	25	25
Other	0	20	20
Total, Other Agency	2,784	2,902	2,246
Technical and Advisory Services	104	105	105
Total, Reimbursable Program	2,888	3,007	2,351

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Technology assistance

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Technology assistance	Pos./BA	104	$10,971	85	$8,522	85	$8,534	97	$10,534	12	$2,000
	FTE/Obl.	114	10,651	92	8,920	93	8,534	102	10,474	9	1,940

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Technology assistance

Line Item	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Technology assistance										
WCF transfers	0	0	0	0	0	0	0	$60	0	$60
Reimbursable FTE/Obl	159	$17,990	153	$18,278	152	$18,874	123	17,934	(29)	(940)
Total	159	17,990	153	18,278	152	18,874	123	17,994	(29)	(880)

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
TECHNOLOGY ASSISTANCE

Goal Statement

The goals of this subactivity are to: 1) diffuse technological advances to users in all segments of the American economy and 2) provide quality assurance techniques which underpin United States commerce, technological progress, improved product reliability, and manufacturing processes. The goals are achieved by providing the scientific and technical community of U.S. industry with linkages and accessibility to national and international standardization activities and standards of measurement themselves. These linkages are crucial to our Nation's efforts to compete in foreign markets.

Base Program

The programs under this subactivity provide a central source of information and leadership for U.S. industry regarding national and international standardization activities and issues concerned with attestation of conformity, including product testing and certification. They also offer industry central access to standard reference materials, standard reference data and calibrations, and therefore traceability to national and international standards of measurement.

NIST operates the National Center for Standards and Certification Information and provides technical assistance to government, industry, and the public on standards-related issues affecting trade. NIST monitors the work of nearly 120 standards committees and manages U.S. participation in the International Organization of Legal Metrology (OIML), especially with respect to those committees (nearly half of the total) in which U.S. Government and industry representatives participate (or chair). NIST also works closely with the National Conference on Weights and Measures (NCWM) to assure uniformity throughout the U.S., as well as technical validity of various laws and regulations governing packaged goods and measurement devices such as scales, gasoline pumps, taxi meters, and fuel oil meters.

NIST provides critically evaluated data on physical and chemical properties of materials to scientists, engineers, and the general public. It assesses needs for reliable data in industry, government, and universities and coordinates NIST data activities with those of other government agencies, private organizations, and international bodies. Recommended data are disseminated through publications, computer-readable databases and reference services tailored to user needs. A portion of this function is fee-supported.

NIST assures accurate and compatible measurements through the development, certification, and distribution of standard reference materials (SRM's); and produces SRM's for use in: (1) industrial production and quality assurance, (2) environmental analysis, (3) health measurements, and (4) basic measurements in science and metrology. NIST coordinates its SRM activities with those of the private sector, other Federal agencies, and other nations including programs with the American Society for Testing and Materials, the International Organization for Standardization, the American Association for Clinical Chemistry, the International Union of Pure and Applied Chemistry, and the European Economic Community. Ninety percent of this function is fee-supported.

Through this subactivity, NIST coordinates industry and other agency access to its 500 different physical calibration and measurement assurance programs; provides assistance to NIST technical staff on physical measurement quality control and experimental design; develops policies and establishes priorities for fee-supported physical measurement services, and evaluates the effectiveness of dissemination mechanisms; and provides a single point of contact with organizations outside NIST having requirements for measurement services such as the National Conference of Standards Laboratories and the Calibration Coordination Group in the Department of Defense.

NIST provides fee-supported accreditation to testing laboratories based on evaluation of their technical qualifications and competence to perform certain types of tests of tests in specified fields. NIST is responsible for designing, implementing and accrediting in 10 major testing fields with 26 subfields, ranging from fasteners to telecommunications. Currently, about 1,000 laboratories are accredited. Available to domestic and foreign laboratories, the accreditation program is utilized by Federal, state and local governments and by commercial manufacturers etc., to provide unbiased evaluation and recognition of testing performance.

FY 1994 operating objectives include the following:

o Provide information on standards-related subjects and technical support to the public, other countries, and for negotiations with Mexico.

o Support government agencies and the private sector with respect to standards, testing, and certification issues associated with developments in the European Community.

o Maintain current handbooks for use by state weights and measures officials and implement a plan for international acceptance of NTEP Certificates of Conformance through the OIML Pattern Approval Plan.

o Develop standard reference materials.

o Develop standard reference data.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Cooperative Research						
- number of CRADAs in effect during fiscal year	3	3	3	3	3	3
- number of new CRADAs signed[2]	80	80	80	80	80	80
- number of research associates and other guest researchers	17	17	17	17	17	17
Services Output						
- Standard Reference Databases						
-- number of databases under development[2]	20	15	15	15	15	15
- Standard Reference Materials						
-- number of reference materials under development[2]	75	70	70	70	70	70
-- number of new SRM's introduced	30	30	30	30	30	30
- National Voluntary Laboratory Accreditation						
-- number of laboratories accredited[2]	775	775	775	775	775	775
- Technology Support						
-- number of NIST patents filed and licenses issued[2]	56	67	67	67	67	67
- Standards						
-- number of NIST staff who chair standards committees[2]	118	118	118	118	118	118
-- number of standards committees involving NIST staff[2]	815	823	823	823	823	823

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

[2] Data reported represent total NIST effort. Where applicable, this effort is also reported in the program area actually performing the work.

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
- Other Information Exchange						
-- number of NIST technical publications[2]	1,850	1,850	1,850	1,850	1,850	1,850
-- number of major NIST-sponsored conferences & workshops[2]	105	105	105	105	105	105
Product and Service sales						
- Calibration and Testing						
-- number of calibrations/tests performed[2]	11,000	12,000	12,000	12,000	12,000	12,000
-- total income	$7.8M	$8.5M	$8.5M	$8.5M	$8.5M	$8.5M
- SRM						
-- number of units sold[2]	49,000	50,000	50,000	50,000	50,000	50,000
-- total income	$9.0M	$9.5M	$9.5M	$9.5M	$9.5M	$9.5M
- SRD						
-- number of database units sold[2]	3,500	4,000	4,000	4,000	4,000	4,000
-- total income	$1.7M	$2.0M	$2.0M	$2.0M	$2.0M	$2.0M
- NVLAP						
-- total income	$4.6M	$3.5M	$3.5M	$3.5M	$3.5M	$3.5M

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

[2] Data reported represent total NIST effort. Where applicable, this effort is also reported in the program area actually performing the work.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Technology assistance	Pos./BA	85	$8,534	97	$10,534	12	$2,000
	FTE/Obl.	93	8,534	102	10,474	9	1,940

Investment Program: International trade and standards (12 Permanent positions, BA +$2,000,000, Direct Obligations +$1,940,000, Transfer to WCF +$60,000) - The initiative seeks to increase the competitiveness of U.S. products in global markets by enhancing the flow of vital standards-related information to manufacturers and exporters; expand the capabilities of U.S. legal metrology laboratories; and harmonize standards for products and for legal metrology in concert with our major trading partners and international organizations.

Problem Magnitude and Scope:

The competitiveness of U.S. products in domestic and world markets is critically dependent on ready access to comprehensive standards-related information. Government and industry require timely knowledge of current and potential markets in order to be able to influence metrological and products standards and conformity assessment procedures adopted by foreign entities. The present disparities among federal, state, and local government requirements and in private sector standards diminish the effectiveness of U.S. interests in international forums and in individual countries, hampering industry's ability to assess needs and markets and to provide appropriate assurances of quality measurements and quality manufacturing. The global nature of economic developments dictates increased unification and harmonization of product and metrological standards, hence the urgent need for strong representation of U.S. technology and methodology expressed with a single voice.

Why NIST:

NIST already has responsibilities under the 1979 U.S. Trade Agreements Act to operate the National Center for Standards and Certification Information, the GATT inquiry point, and the technical office for non-agricultural products, and is completing a pilot project of standards assistance for the Saudi Arabia Standards Organization. NIST operates the National Voluntary Laboratory Accreditation Program; it also sponsors the National Conference on Weights and Measures (NCWM) and certifies State weights and measures laboratories. NIST has a long history of developing needed measurement techniques for industrial application and has been asked by other governments to assist them and to provide U.S. Government assurances concerning the competence of U.S. measurements and testing and the accreditation of bodies that perform these functions. NIST also has received requests from industry and from other U.S. Government agencies for comprehensive standards-related information services and for cooperation in the standardization of weights and measures regulations.

Description of the Proposed NIST Technical Program:

In cooperation with the International Trade Administration's U.S. and Foreign Commercial Service (US&FCS), NIST will assign technical experts to key U.S. embassies and missions to respond to questions related to standards, conformity assessment, metrology, and other areas for technology transfer that have current or future trade importance. These advisors will promote U.S. laboratory and field standards technology and will furnish advice for foreign developments important to U.S. producers. Technical support will be provided by expert NIST staff, U.S. equipment manufacturers and service companies, and other public and private sector specialists. Measurement expertise at NIST will be transferred to qualified domestic metrology laboratories operated by state governments and the private sector and coordinated programs will be developed with other agencies and with Canada. Intensive efforts will be conducted to harmonize metrological standards with other countries and in the International Organization of Legal Metrology (OIML).

Economic Impacts:

Adoption of U.S. technology and standards-related concepts and methodology will markedly increase the acceptability of U.S. products in world markets. Technical advisors in key market areas will ensure the timely flow of information about foreign needs and requirements, permitting quick, competitive reactions in design, production and sales. The effective input of U.S. technological concepts into international standardization activities and in trade negotiations will reduce incompatibilities and inefficiency. The harmonization of legal metrology requirements with other countries will significantly expand markets for U.S. producers. Wide recognition of the U.S. National Type Evaluation Program for metrological devices, in concert with OIML participation, will accelerate production and sales for the major industrial sector for weighing and measuring.

Costs and Benefits:

With funding of $2,000,000 requested per year, NIST will provide both near-term and long-term results of benefit to industry.

Technical advisors for standards and conformity assessment will be assigned to work with the US&FCS, providing partial coverage for legal metrology. Automated calibration packages will be fabricated by the end of the first year, followed by more precise mass calibrations. In the second year, international metrological training will promote adoption of U.S. standards in the Americas, and concomitant structural changes in the NCWM will lead to unification of State and Federal weights and measures programs, along with increased harmonization of legal requirements between the United States and Canada, and subsequently to Mexico and other American countries. Increased Western Hemisphere influence in OIML standards will lead to greater compatibility internationally.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and engineering research and standards
Subactivity: Technology assistance
Investment Program: International trade and standards

Title		Grade	Number	Annual Salary	Total Salaries
General physical scientist		15	2	$66,609	$133,218
Supervisory physical scientist		15	1	66,609	66,609
General physical scientist		14	2	56,627	113,254
General physical scientist		13	3	47,920	143,760
Computer specialist		12	1	40,298	40,298
Standards coordinator		12	1	40,298	40,298
Administrative/technical support		9	1	27,789	27,789
Secretary		5	1	20,173	20,173
Subtotal			12		585,399
Less lapse	25 %		(3)		(146,350)
Total full–time permanent (FTE)			9		439,049

Personnel Data	
Full–Time Equivalent Employment:	
Full–time permanent	9
Authorized Positions:	
Full–time permanent	12

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Measurement and engineering research and standards
Subactivity: Technology assistance
Investment Program: International trade and standards

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full-time permanent	$439	$439
11.9	Total personnel compensation	439	439
12.1	Civilian personnel benefits	127	127
·21	Travel and transportation of persons	113	113
22	Transportation of things	26	26
23.3	Communications, utilities and miscellaneous charges	130	130
24	Printing and reproduction	35	35
25.2	Other services	976	976
26	Supplies and materials	74	74
31	Equipment	20	20
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	1,940	1,940
	Transfer to NIST Working Capital Fund		60
	Total increase requested		2,000

Technology Assistance
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollar amounts in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Other	$23	$24	$25
Subtotal, Department of Defense	23	24	25
Department of Agriculture	3	5	5
Department of Commerce	5	0	0
Department of Energy	1,631	1,800	1,500
National Aeronautics and Space Administration	18	19	20
Other	2,757	2,470	2,004
Total, Other Agency	4,437	4,318	3,554
Calibrations and Tests	2,218	2,285	2,354
Standard Reference Materials(SRM)	5,559	5,726	5,898
Technical and Advisory Services	5,776	5,949	6,128
Total, Reimbursable Program	17,990	18,278	17,934

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Research support activities

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item		Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Technical competence program	Pos./BA	58	$7,516	65	$7,862	65	$8,054	65	$8,054	0	0
	FTE/Obl.	63	7,535	69	7,885	70	8,054	70	8,054	0	0
Postdoctoral fellowship program	Pos./BA	57	4,128	66	4,889	72	5,919	72	5,919	0	0
	FTE/Obl.	63	3,970	69	4,922	76	5,919	76	5,919	0	0
Computer support	Pos./BA	45	12,043	64	12,834	64	12,131	64	12,131	0	0
	FTE/Obl.	49	12,240	68	13,053	69	12,131	69	12,131	0	0
Facililities modifications and improvements	Pos./BA	11	5,273	10	10,000	5	5,153	5	5,153	0	0
	FTE/Obl.	12	5,425	9	10,050	5	5,153	5	5,153	0	0
Special Facilities: Cold Neutron	Pos./BA	33	7,594	0	0	0	0	0	0	0	0
	FTE/Obl.	36	6,091	0	3,320	0	0	0	0	0	0
Total	Pos./BA	204	36,554	205	35,585	206	31,257	206	31,257	0	0
	FTE/Obl.	223	35,261	215	39,230	220	31,257	220	31,257	0	0

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and engineering research and standards
Subactivity: Research support activities

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Computer support										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	8	$2,035	5	$1,037	0	0	0	0	0	0
Total	8	2,035	5	1,037	0	0	0	0	0	0
Facilities modifications and improvements										
WCF transfers	0	0	0	36	0	0	0	0	0	0
Reimbursable FTE/Obl	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	36	0	0	0	0	0	0
Technical reimbursable services										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	0	332	0	342	0	$353	0	$353	0	0
Total	0	332	0	342	0	353	0	353	0	0
Non–technical support services										
WCF transfers	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl	10	3,793	10	5,647	10	5,817	10	5,817	0	0
Total	10	3,793	10	5,647	10	5,817	10	5,817	0	0
Total										
WCF transfers	0	0	0	36	0	0	0	0	0	0
Reimbursable FTE/Obl	18	6,160	15	7,026	10	6,170	10	6,170	0	0
Total	18	6,160	15	7,062	10	6,170	10	6,170	0	0

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
RESEARCH SUPPORT ACTIVITIES

Goal Statement

This subactivity facilitates industry and government efforts to enhance the competitiveness of American industry by providing appropriate support for Industry's development of pre-competitive generic technologies and diffusing technological advances to users in all segments of the American economy. In particular, this subactivity provides for (1) programs to respond to needs for new technical competencies, (2) regular infusion of outstanding postdoctoral scientists and engineers, (3) maintenance of adequate central scientific computing resources, and (4) providing the staff with the facilities necessary to carry out the technical work.

Base Program

The four programs under this subactivity are centrally managed activities which provide support to all other NIST programs. Specifically, the programs provide competence development in NIST mission-oriented areas of research; high caliber scientists and engineers for ongoing research programs; central computing support for the research programs; and a safe environment for conducting NIST technical programs. The Cold Neutron Research Facility is now fully operational; funding to support that operation is included in the Materials Science and Engineering subactivity.

Technical Competence Program - Resources provided through this program enable NIST scientists to respond to new scientific and technical opportunities and to new requirements assigned by the Administration and Congress, or imposed by developments in industry, Government, academia or the public. The capacity to respond is based on the availability of teams of scientists and engineers working at the forefront of research in various areas related to future advanced technologies with the ability to devote their efforts to specific, new problems as they arise.

FY 1994 base program operating objectives include the following:

o Select and initiate three to seven new competence projects, at the discretion of the Director and senior NIST managers. This fundamental research will create a window on emerging areas of science and technology and provide NIST's scientists and engineers with the knowledge and skills that are necessary in addressing state-of-the-art technical opportunities and needs. Successful projects continue to be supported by competence funds for approximately five years.

Postdoctoral Fellowship Program - Through this program, NIST supports a nationwide competitive postdoctoral research fellowship program administered in cooperation with the National Academy of Sciences/National Research Council. The fellowship program brings outstanding research scientists and engineers to work on NIST research projects, strengthens mutual communication with university researchers, and provides a valuable mechanism for the transfer of research results from NIST to the scientific and engineering communities.

FY 1994 base program operating objectives include the following:

o Select postdoctoral scientists and engineers of unusual promise and ability to perform advanced research related to the NIST mission.

o Introduce the latest university research results and techniques to NIST scientific programs and share NIST unique research facilities with the U.S. scientific and engineering community.

Computer Support - This program provides staffing, operation and support of the supercomputer, and the associated computers and equipment, which comprise the central component of the Scientific Computer System (SCS) serving NIST. Expert assistance and training is provided to users to improve the productivity of the system. Organizational elements involved are the Applied and Computational Mathematics Division, Computer Services Division and the Scientific Computing Environments Division of the Computing and Applied Mathematics Laboratory.

SCS enables NIST scientists and engineers to meet essential scientific needs for large-scale high precision numerical calculations, large-scale mathematical modeling, sophisticated data analysis, and database management. This computing capability enhances the scope and effectiveness of NIST long-range solutions to important problems in such areas as atomic and molecular properties, manufacturing, materials processing, biochemical engineering, and high-performance electronic components. Computer scientists, computer system specialists, and applied mathematicians help users to exploit the novel architecture capabilities of the supercomputers.

FY 1994 base program operating objectives include the following:

o Integrate the centralized mass storage system into the NIST computing and communications environment to enable its effective use by NIST scientists.

o Integrate advanced massively parallel computing equipment and scientific visualization devices with Gaithersburg systems and intersite networks.

Facilities Modifications and Improvements - Resources in this program are utilized in Gaithersburg, MD, and Boulder, CO, to improve operational capabilities of NIST facilities support systems, undertake the highest priority safety and system capacity facilities retrofit projects to maintain NIST's buildings and laboratory facilities in compliance with more stringent science and engineering program requirements and with various federal, state, and local health and safety regulations, undertake modifications to improve access for the handicapped, and continue the design work leading towards construction of new facilities.

FY 1994 base program operating objectives include the following:

- Provide improvements, replacements, and modifications to the NIST facilities that ensure the continued usefulness and safety of existing laboratories and buildings and compliance with PCB and asbestos regulations.
- Continue multiyear projects to replace fire and mechanical alarm systems at both Gaithersburg and Boulder, and expand the Gaithersburg central plant.
- Continue correcting electrical problems by upgrading transformers and burying main power lines at Boulder.
- Continue a multi-year upgrade of sewer and water lines at Boulder.
- Continue the design work leading towards construction of new facilities.

Research Support Activities
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Commerce	$4,259	$3,333	$2,372
Department of Justice	249	256	264
National Aeronautics and Space Administration	50	52	54
Department of the Treasury	51	53	55
Other	52	54	56
Total, Other Agency	4,661	3,748	2,801
Technical and Advisory Services	3,188	3,278	3,369
WCF Investment	(1,689)	0	0
Total, Reimbursable Program	6,160	7,026	6,170

Exhibit 16

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
11	Personnel compensation					
11.1	Full–time permanent	$79,411	$87,162	$88,575	$102,104	$13,529
11.3	Other than full–time permanent	6,053	6,103	6,145	6,145	0
11.5	Other personnel compensation	2,163	2,180	2,180	2,180	0
11.9	Total personnel compensation	87,627	95,445	96,900	110,429	13,529
12.1	Civilian personnel benefits	16,496	18,588	19,583	23,504	3,921
13	Benefits for former personnel	92	94	95	95	0
21	Travel and transportation of persons	3,349	3,084	3,136	4,459	1,323
22	Transportation of things	419	355	356	895	539
23.2	Rental payments to others	463	526	566	566	0
23.3	Communications, utilities, and miscellaneous charges	8,514	8,977	9,276	13,007	3,731
24	Printing and reproduction	481	343	357	604	247
25.1	Consulting services	672	586	572	572	0
25.2	Other services	25,561	29,923	30,435	41,409	10,974
26	Supplies and materials	9,884	16,000	11,650	13,584	1,934
31	Equipment	16,745	21,262	17,613	18,575	962
32	Land and structures	1,762	110	110	110	0
41	Grants, subsidies, and contributions	6,561	6,489	6,489	6,489	0
42	Insurance claims and indemnities	7	0	0	0	0
99	Total Obligations	178,633	201,782	197,138	234,298	37,160
	Transfer to NIST Working Capital Fund			50	6,690	6,640
	Total Requirements			197,188	240,988	43,800

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	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Personnel Data					
Full–time equivalent employment:					
Full–time permanent	1,536	1,648	1,638	1,931	293
Other than full–time permanent	162	152	170	170	0
Total	1,698	1,800	1,808	2,101	293
Authorized Positions:					
Full–time permanent	1,627	1,696	1,684	2,046	362
Other than full–time permanent	236	200	222	222	0
Total	1,863	1,896	1,906	2,268	362

Exhibit 17

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	0	$111	$111	0
	Senior executive service	($177)	4,928	4,928	0
	General schedule	1,635	77,792	91,321	$13,529
	Wage board	70	4,708	4,708	0
	Scientific & professional (P.L. 80-313)	7	1,036	1,036	0
	Subtotal	1,535	88,575	102,104	13,529
11.3	Other than full-time permanent				
	General schedule	39	5,724	5,724	0
	Wage board	2	292	292	0
	Scientific & professional (P.L. 80-313)	1	94	94	0
	Experts & consultants	0	33	33	0
	Student	0	2	2	0
	Subtotal	42	6,145	6,145	0
11.5	Other personnel compensation				
	Overtime	0	448	448	0
	SES performance awards	0	201	201	0
	Cash awards	0	1,433	1,433	0
	Other	0	98	98	0
	Subtotal	0	2,180	2,180	0
11.9	Total personnel compensation	1,577	96,900	110,429	13,529

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits				
	Civil service retirement	(76)	3,671	3,671	0
	Federal employees' retirement	338	5,127	6,883	1,756
	Thrift savings plan	54	1,327	1,731	404
	Federal Insurance Contribution Act	168	3,848	4,885	1,037
	Health insurance	588	4,569	5,232	663
	Life insurance	2	169	230	61
	Employees' Compensation Fund	(65)	608	608	0
	Other	0	264	264	0
	Subtotal	1,009	19,583	23,504	3,921
13	Benefits for former personnel				
	Severance pay	0	56	56	0
	Unemployment compensation	0	39	39	0
	Subtotal	0	95	95	0
21	Travel and transportation of persons				
	Common carrier	(17)	1,237	1,773	536
	Mileage	0	78	111	33
	Per diem/actual	73	1,389	1,947	558
	Other	(4)	432	628	196
	Subtotal	52	3,136	4,459	1,323
22	Transportation of things	1	356	895	539
23.2	Rental payments to others	5	566	566	0

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
23.3	Communications, utilities, and miscellaneous charges				
	Rental of ADP equipment	0	131	136	5
	Rental of office copying equipment	5	294	494	200
	Other equipment rental	24	386	593	207
	Federal telecommunications system	(1)	301	437	136
	Other telecommunications services	(1)	1,129	1,769	640
	Postal Service by USPS	(2)	579	880	301
	Utilities:				
	Electric	547	4,529	6,059	1,530
	Gas	102	1,169	1,615	446
	Water/Sewer	81	758	1,024	266
	Subtotal	755	9,276	13,007	3,731
24	Printing and reproduction				
	Publications	6	190	380	190
	Other	8	167	224	57
	Subtotal	14	357	604	247
25.1	Consulting services	0	572	572	0
25.2	Other services				
	Training:				
	Office of Personnel Management	0	12	12	0
	Other	(1)	800	910	110
	Maintenance of equipment	568	5,639	5,893	254
	ADP Services	(250)	323	523	200
	Payments to GA, WCF	76	1,623	1,623	0
	Other Federal agencies:				
	Dept. of Commerce	(228)	2,129	9,007	6,878
	Other	(5)	940	1,340	400
	Other non-government contracts	1,221	18,969	22,101	3,132
	Subtotal	1,381	30,435	41,409	10,974

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
26	Supplies and materials				
	Office & laboratory supplies	75	8,826	10,760	1,934
	Scientific publications & journals	0	76	76	0
	Fuel oil	0	110	110	0
	Reactor Fuel	0	2,638	2,638	0
	Subtotal	75	11,650	13,584	1,934
31	Equipment				
	Office machines and other equipment	(22)	1,627	2,321	694
	ADP equipment	(1,685)	2,830	3,098	268
	Equipment depreciation	1,086	13,156	13,156	0
	Subtotal	(621)	17,613	18,575	962
32	Land and structures	0	110	110	0
41	Grants, subsidies, and contributions	0	6,489	6,489	0
42	Insurance claims and indemnities	0	0	0	0
99	Total Obligations	4,248	197,138	234,298	37,160
	Transfer to NIST Working Capital Fund	0	50	6,690	6,640
	Total Requirements	4,248	197,188	240,988	43,800

Exhibit 32

Department of Commerce
National Institute of Standards and Technology

Scientific and Technical Research and Services
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

1. After the words "Working Capital Fund," delete the words "and of which not to exceed $5,000,000 may be available for architectural and engineering studies for construction and for repair of research facilities."

   This function is proposed for inclusion in the Construction of Research Facilities appropriation.

2. Additional language has been added to address the Administration's investment request.

Exhibit 33

Department of Commerce
National Institute of Standards and Technology

Scientific and Technical Research and Services
APPROPRIATION LANGUAGE AND CODE CITATIONS

1. For necessary expenses of the National Institute of Standards and Technology,

15 U.S.C. 272; 273; 275c; 278b-f; 278g-1; 278g-2; 278g-3; 278h
15 U.S.C. 290b-f
15 U.S.C. 1454(d), 1454(e)
15 U.S.C. 1512
40 U.S.C. 759(f)

15 U.S.C. 272; 273; 278b-f; 278g-1; 278g-2 provide basic authority for the performance of the functions and activities of the National Institute of Standards and Technology.

15 U.S.C. 278g-3 gives NIST responsibility for developing standards and guidelines for Federal computer systems, and for developing standards and guidelines needed to assure cost effective security and privacy of sensitive non-national-security-related information in Federal computer systems.

15 U.S.C. 278h authorizes appropriations for performance and functions of the National Institute of Standards and Technology.

15 U.S.C. 290b-f direct the Secretary of Commerce to provide for the collection, compilation, critical evaluation, publication, and dissemination of standard reference data.

15 U.S.C. 1454(d), 1454(e) assign responsibilities to the Secretary of Commerce to determine when undue proliferation exists, to develop and publish voluntary product standards, and to maintain surveillance of such standards.

15 U.S.C. 1512 provides "It shall be the province and duty of said Department to foster, promote, and develop the foreign and domestic commerce... of the United States."

40 U.S.C. 759(f) authorizes the Secretary of Commerce to undertake research in the science and technologies of automatic data processing, computer and related systems, and to establish uniform Federal standards.

2. $197,188,000, to remain available until expended,

no specific authority

31 U.S.C. 718 - Appropriations in annual Appropriation Acts not permanent, states: "No specific or indefinite appropriations... shall be construed to be permanent or available continuously... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriations Act in which it is contained makes provisions."

3. of which not to exceed $50,000 may be transferred to the "Working Capital Fund."

15 U.S.C. 278b

15 U.S.C. 278b provides in part: "The National Institute of Standards and Technology is authorized to utilize in the performance of its functions the Working Capital Fund..."

4. In addition to amounts available under this heading, and subject to the same terms and conditions, $43,800,000 to remain available until expended, of which not to exceed $6,640,000 may be transferred to the "Working Capital Fund."

Additional authorizing legislation will be proposed for FY 1994.

Exhibit 34

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
Scientific and Technical Research and Services
CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1992 Actual	FY 1993 Estimate	FY 1994 Estimate
Management and Professional Support Services	672	586	572
Total	672	586	572

Significant Activities

Consulting and related services funded by the STRS appropriation are concerned with:

(1) evaluation of candidates for the NIST PostDoctoral Program.

(2) the review and evaluation of the technical functions and operations of NIST by Boards of Assessment of the National Academy of Sciences. The Evaluation Panels consider the importance and relative priority of projects, quality of staff, equipment needs, finances, and the relation of the program to the mission of NIST.

(3) contract with the National Academy of Sciences (NAS) to support the U.S. National Committee (UNC) for the Committee on Data for Science and Technology (CODATA).

Need for Consulting Services:

The need for consulting and related services stems from the NIST role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its program plans to meet the needs of its customers. The alternative to utilizing these services is to make no attempt to have expertise from sources outside NIST and risk having a poorer working and professional relationship with those in the business of using the products and services offered by NIST.

Internal Controls to Ensure Appropriate Use:

Requisition requests from NIST program managers for advisory and assistance services must be accompanied by written justification for the need for such services. Personal services contracts require review by the Personnel Office.

Exhibit 5

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar Amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Appropriation available, 1993	91	$86,067	98	$131,198
	less: Unobligated balance		0		(45,131)
NIST–143	plus: 1994 Adjustments to base	19	457	22	457
	1994 Base	110	86,524	120	86,524
	plus: 1994 Investments	71	144,000	61	142,077
	plus: Other 1994 program changes	4	2,000	2	1,929
	1994 Appropriation request	185	232,524	183	230,530
	less: Working Capital Fund transfer	——	(1,994)	——	——
	1994 Estimate	185	230,530	183	230,530

			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Comparison by activity:		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
	Extramural programs											
NIST–149	Advanced technology program	Pos./BA	15	$47,363	77	$67,880	77	$67,489	139	$199,489	62	$132,000
		FTE/Obl.	18	40,350	84	110,238	87	67,489	141	197,626	54	130,137
NIST–161	Technology transfer and outreach	Pos/BA	3	16,350	14	18,187	33	19,035	46	33,035	13	14,000
		FTE/Obl	2	17,195	14	20,960	33	19,035	42	32,904	9	13,869
	Direct Obligations	Pos/BA	18	63,713	91	86,067	110	86,524	185	232,524	75	146,000
		FTE/Obl	20	57,545	98	131,198	120	86,524	183	230,530	63	144,006

	1992 Actual		Currently Available		1994 Base		1994 Estimate		(Decrease) Over 1994 Base	
	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Adjustments to obligations:										
Unobligated balance, start of year		(38,963)		(45,131)						
Unobligated balance, end of year		45,131		0						
Financing from transfers:										
Transferred to other accounts		0		0		0		1,994		1,994
Appropriation		63,713		86,067		86,524		232,524		146,000

Exhibit 7

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Total Obligations	$57,545	$131,198	$86,524	$230,530	$144,006
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non–Federal sources	0	0	0	0	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	(38,963)	(45,131)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	45,131	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	63,713	86,067	86,524	230,530	144,006
Financing:					
Transfer to other accounts	0	0	0	1,994	1,994
Appropriation	63,713	86,067	86,524	232,524	146,000

Exhibit 8

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Increase/(Decrease)		
	Perm. Pos.	FTE	Amount
Transfers:			
Quality program transfer from STRS appropriation	7	7	$800
Quality program transfer from Working Capital Fund	12	12	0
Adjustments:			
Limits on grant overhead	0	0	(493)
Other Changes:			
1993 Pay raise	0	0	10
Annualization of prior-year positions	0	2	0
FTE adjustment	0	1	0
Within-grade step increases	0	0	13
Civil Service Retirement System (CSRS)	0	0	(2)
Federal Employees Retirement System (FERS)	0	0	3
Federal Insurance Contributions Act (FICA) - OASDI	0	0	1
Health insurance	0	0	6
Travel: Per diem	0	0	5
Transportation of things	0	0	2
Communications, utilities, and miscellaneous charges:			
Rental of equipment	0	0	1
Utilities	0	0	17
Printing and reproduction	0	0	7
Other services			
WCF	0	0	1
Other services	0	0	70
Supplies and materials	0	0	11
Equipment	0	0	5
Subtotal, other changes	0	0	150
Total, adjustments to base	19	22	457

Exhibit 9

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Transfers:		
Quality Program transfer from STRS appropriation	7	$800

NIST proposes an appropriation transfer of 7 FTEs and $800,000 of STRS resources to the ITS appropriation in support of the Quality Program. These resources constitute NIST's maximum available contribution of appropriated funds to the increased Quality Outreach program described in the program change section of the ITS budget.

	FTE	Amount
Quality Program Transfer from Working Capital Fund	12	0

NIST proposes a transfer of 12 FTEs from the Working Capital Fund to the ITS appropriation in support of the Quality Program.

Adjustments

	FTE	Amount
Limits on grant overhead	0	(493)

Pursuant to the Executive Order on Deficit Control and Productivity Improvement in the Administration of the Federal Government, there will be a savings of $493,000 in FY 1994.

Other Changes:

	FTE	Amount
Full-year cost of 1993 pay increase and related costs	0	10

A pay raise of 3.7% was effective January 1, 1993.

Total cost in FY 1994 of 1993 pay increase	39
Less amount funded in FY 1993	(29)
Less amount absorbed	0
Amount requested in FY 1994 to provide full-year cost of 1993 pay increase	10

Annualization of prior-year positions	2	0

NIST requires two additional FTEs to staff FY 1993 Congressional increases at their full operating level in FY 1994.

FTE adjustment	1	0

NIST requires an adjustment of 1 FTE to restore a one-time reduction of FTEs in FY 1993.

Within-grade step increases	0	13

An increase of $13,000 is required to cover the cost of within-grade step increases. This estimate reflects the net cost of step increases, including merit pay increases, which will be earned in FY 1994.

Estimated number of within-grade step increases	1,641
Step increases not earned due to turnover (5.78% x 1,641)	95
Average step above step 1 per separation	3
Average cost per within-grade step increase	1,167
Gross cost of scheduled step increases ($1,167 x 1,641)	1,915,047
Less savings due to separations ($1,167 x 95 x 3)	(332,595)
Subtotal, personnel compensation	1,582,452
ITS share (.7%)	11,077
Benefits	1,663
Total adjustment to base	12,740

Personnel benefits	0	8

Civil Service Retirement System (CSRS)	(2)
Federal Employees Retirement System (FERS)	3
Federal Insurance Contributions Act (FICA) - OASDI	1
Health Insurance	6

Civil Service Retirement System (-$2,000) - The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System (FERS). The estimated percentage of payroll for employees covered by CSRS will drop from 57.4 percent for CSRS in FY 1993 to 55.3 percent in FY 1994. Contribution rates will remain the same.

Payroll subject to retirement systems ($1,214,500)	
Cost of CSRS contributions in FY 1994 ($1,214,500 x .553 x .07)	$47,013
Costs of CSRS contributions in FY 1993 ($1,214,500 x .574 x .07)	48,799
Total adjustment to base	(1,786)

Federal Employees Retirement System ($3,000) - The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. The estimated percentage of payroll for employees covered by FERS will rise from 42.6 percent in FY 1993 to 44.7 percent in FY 1994. The contribution rate will remain the same.

Payroll subject to retirement systems ($1,214,500)	
Basic benefit cost in 1994 ($1,214,500 x .447 x .129)	$70,032
Basic benefit cost in 1993 ($1,214,500 x .426 x .129)	66,742
Total adjustment to base	3,290

Federal Insurance Contributions Act (FICA) - OASDI ($1,000) - As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to OASDI tax rises from $57,300 in FY 1993 to $60,150 in FY 1994. The OASDI tax rate will remain 6.2 percent in FY 1994.

FERS payroll subject to FICA tax in FY 1994 ($1,214,500 x .447 x .9470 x .062)	$31,875
FERS payroll subject to FICA tax in FY 1993 ($1,214,500 x .426 x .9503 x .062)	30,483
Total OASDI increase (FY 1993-FY 1994)	1,392

Health insurance ($6,000) - Effective January 1992, NIST's contribution to Federal employees' health insurance premiums increased by $910,000. The ITS share of this increase is $6,000. The total increase was computed based on employee participation in the various health benefit plans and the associated increases.

Travel per diem	0	5

Effective January 1992, the General Services Administration raised per diem rates. This increase results in a 6.2 percent increase to NIST. This percentage was applied to the FY 1993 ITS estimate of $79,000 to arrive at an increase of $5,000.

Transportation of things	0	2

The cost of transporting such things as household goods, scientific instruments, and hazardous materials increased during the past year. The $2,000 increase was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimate of $76,000.

Communications, utilities, and miscellaneous charges		0	18
Rental of equipment	1		
Utilities	17		

Rental of equipment ($1,000) - An increase of $1,000 for rental of equipment was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimates of $35,000 for rental of office copying equipment and $23,000 for other rental equipment.

Utilities ($17,000) - This adjustment to base is required to pay the additional cost of electricity, natural gas, and water/sewer arising from rate increases in FY 1992. The ITS share of this increase is $17,000.

Printing and reproduction	0	7

GPO has provided an estimated rate increase of 3.7 percent. This percentage was applied to the FY 1993 estimate of $196,000 to arrive at an increase of $7,000.

Other services	0	71

Increases in costs for recurring contractual support services have been experienced. This is due principally to increases in salary costs for the services performed, increases in costs for materials and supplies, and increases for equipment maintenance. A detail by service follows:

Services	FY 1993 Budget	Revised Estimate	Increase In Cost
WCF GA	2	3	1
Periodicals	5	6	1
Maintenance of equipment	17	19	2
Other support services	1,974	2,041	67
TOTAL	1,998	2,069	71

Supplies and materials 0 11

Laboratory and general supplies ($11,000) - Based on the GDP deflator of 2.4 percent, the cost of supplies and materials is expected to increase by $11,000 from the FY 1993 estimate of $445,000.

Equipment 0 5

Office-ADP-Other Equipment ($5,000) - The $5,000 increase was calculated by applying the 2.4 percent GDP price deflator to the FY 1993 estimate of $227,000 for office, ADP, and other equipment.

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Extramural programs
Subactivity: Advanced technology program

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
Line Item		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Advanced technology program	Pos./BA	15	$47,363	77	$67,880	77	$67,489	139	$199,489	62	$132,000
	FTE/Obl.	18	40,350	84	110,238	87	67,489	141	197,626	54	130,137

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Extramural programs
Subactivity: Advanced technology program

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Advanced technology program										
WCF transfers	0	0	0	0	0	0	0	$1,863	0	$1,863
Reimbursable FTE/Obl	0	$897	0	$924	0	$952	0	952	0	0
Total	0	897	0	924	0	952	0	2,815	0	1,863

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
ADVANCED TECHNOLOGY PROGRAM

Goal Statement

The goal of this subactivity is to enhance the competitiveness of American industry by providing appropriate support for the industry's development of precompetitive generic technologies and diffusing technological advances to users in all segments of the American economy.

Base Program

The Advanced Technology Program (ATP) provides shared-risk financial assistance combined with opportunities for cooperating with NIST to develop or transfer technologies that can improve U.S. manufacturing capabilities at all stages of technological sophistication. The ATP is the focus of a national effort to help accelerate the commercialization of pre-competition generic technologies. The ATP provides incentives for companies to form consortia in their development efforts.

Advanced Technology Program (ATP) - The ATP is a cost-shared, industry-led program providing financing to U.S. businesses and joint R&D ventures to assist them in improving their competitive position by accelerating the development of pre-competitive generic technologies. To be funded, projects must involve high-risk technologies that have substantial potential benefits to the United States. In a broad sense, the program's goal is to help bridge the gap between more fundamental R&D (where the U.S. excels) and commercially applied R&D, where many believe the U.S. lags. The program is open to all areas of advanced technology. To date, sixty projects have been funded (including 18 joint ventures). These projects commit over $180 million in federal funds and over $200 million in private sector funds over their lifetime. An additional 20 or more projects will be selected for awards before the end of fiscal year 1993.

Technology areas include:

- Machine Tools
- Image Recognition and Processing
- Semiconductor Processing
- Superconductors
- Flat Panel Display Manufacturing
- Lasers and Electro-optics
- High Performance Computers
- Optical and Magnetic Data Storage
- Ceramics, Composites, and Polymers
- Automated Manufacturing and Robotics
- Motor Vehicle Assembly
- Plastic Recycling
- Genetic and Tissue Engineering
- Energy Conservation and Distribution
- X-Ray Lithography and Optics
- Printed Wiring Boards
- Optical Communication
- Illumination

The target population includes technologically advanced U.S. businesses able to carry out the development of new and emerging technologies with the potential to affect the economy significantly. Universities, federal laboratories (other than NIST), and independent research institutes may receive funding through business or joint venture recipients. Joint ventures are encouraged to include small businesses.

At this point the ATP is an important, but experimental program, intended to accelerate the pace of commercial technology development. The potential underlying benefit of the program will be to stimulate long-term industrial investment, on a shared risk basis, in developing technology of potential benefit to many U.S. industries.

FY 1994 operating objectives include the following:

- provide $67.9 million for continuing multi-year grants. Of this amount, an assessment of 1.5 percent of the base will be directed to the Department of Commerce Small Business Innovation Research program in compliance with the Small Business Innovation Development Act of 1982, Public Law 97-219 as amended.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
o Number of competitions completed	2	0	1	1	1	1
o Number of new grants awarded	41	0	20	25	20	20
o Number of active projects	79	71	57	56	61	57
o Amount of industry matching funds committed ($M)	129	0	80	100	80	80

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Advanced technology program (ATP)	Pos./BA	77	$67,489	139	$199,489	62	$132,000
	FTE/Obl.	87	67,489	141	197,626	54	130,137

Investment Program: Advanced technology program (ATP) expansion (62 Permanent positions, BA +$132,000,000, Direct Obligations +$130,137,000, Transfer to WCF +$1,863,000) - This request will enable NIST to expand its extramural efforts on behalf of U.S. industry by promoting industrial innovation and reducing barriers to commercialization, facilitating industry and government efforts to improve quality, and promoting entrepreneurship.

Problem Magnitude and Scope:

Both the Congress and the Administration are concerned that U.S. competitiveness in high-technology fields is lagging. While the United States is a world leader in basic research, our Nation's ability to commercialize new technology quickly and efficiently has been increasingly questioned. U.S. companies in fields such as semiconductor materials, devices, and manufacturing equipment; machine tools; robotics; high definition imaging and displays; and lasers have been losing significant market share to aggressive overseas competition. Aversion to technical risk and concerns over time-to-market, and difficulties in capturing fully the return on investment in generic technologies have resulted in underinvestment by the private sector in areas essential to the long-run economic health of the country. Reflecting this problem, the Administration's February 1993 Economic Plan proposed a number of new programs to improve the competitiveness and productivity of U.S. companies and assist those companies to accelerate the development and commercialization of new technologies. One of the new initiatives proposed in the plan is to increase the ATP budget over a four year period to a level of about $740 million in fiscal year 1997. The fiscal year 1994 budget increase represents the first phase of this plan.

The ATP helps U.S. industry reap the rewards of U.S. science by supporting cost-shared, industry-led development of pre-competitive, generic technologies that are beyond the scope of individual firms and that are critical to long-term U.S. economic growth and industrial productivity. The ATP leaves it to the private sector to determine which technologies should be pursued. The ATP directly funds companies and joint ventures led by companies -- universities, Federal laboratories, and independent research institutes may receive funding through a company-led project. This approach assures that projects and priorities are "market-driven" rather than "technology-push" in nature. A competitive process, with NIST and other agency scientists and engineers as well as private-sector business experts participating in the review of proposals, is used to select recipients for funding. Accordingly, the program's impact potentially reaches all technology-based industry sectors in the U.S.

Why NIST:

The Omnibus Trade and Competitiveness Act of 1988 (PL 100-418), as amended by PL 102-245, established the Advanced Technology Program and assigned responsibility for it to NIST. NIST, with its close ties to industry and its leadership in advanced technology, is uniquely qualified to administer the ATP. This request is for expansion of the existing ATP, codified in Title 15 of the Code of Federal Regulations, Part 295.

Description of the Proposed NIST Technical Program:

The ATP is an extramural program to provide shared-risk financial assistance for U.S. businesses to improve their competitive position. Proposals must involve precompetitive generic technologies having high technical and economic leverage. Proposals from individual businesses or joint ventures are selected through a rigorous review system by technical and business experts. Criteria for selection include scientific and technical merit, the potential for broad-based economic benefits, and the applicant's capability for and intention of following through on the proposed work, as evidenced by the applicant's experience and qualifications, level of commitment, and plan for commercializing the technology after Federal funding ends.

Innovative techniques for overcoming present technical barriers are likely to result from this initiative in areas such as biotechnology, advanced materials, semiconductors, superconductors, electro-optic devices, advanced computing, flexible computer integrated manufacturing, intelligent processing equipment, and systems management technologies. Major industries likely to be affected include electronics, automobiles, energy, computers, telecommunications, agriculture, medicine, chemicals, and others.

In its first three competitions, the ATP had funding sufficient to support only 60 projects (including 18 joint ventures) out of 660 proposals submitted -- a very low percentage compared to many other federal programs that fund extramural research. The initial 60 projects represent nearly $400 million of R&D over the next five years, approximately $190 million of which has been committed by the ATP and $210 million by the companies. While the 60 projects represent a broad spectrum of important technologies, there has not been sufficient funding to cover any technology area in depth.

The requested increase will ensure that the ATP will have sufficient funds to: (1) support the out-years for all active multi-year projects (75-100 depending on approval of supplemental) initiated prior to the beginning of fiscal year 1994, (2) support at least two additional open competitions during fiscal year 1994 resulting in about 100 new awards, and also (3) hold at least two competitions focusing on broad technology areas during fiscal year 1994 resulting in about 20 new awards. The technology areas will be carefully chosen in consultation with the private sector and other Federal agencies and also through analysis of technology topics covered by proposals submitted. By the end of fiscal year 1994, the ATP would be funding approximately 270 active projects (including those resulting from the proposed fiscal year 1993 supplemental). This will result in rapid growth for the program in a manner compatible with the objectives of the Administration's economic plan. This is in contrast to the rather slow growth of the program in the last four years that resulted in only 60 projects being started. There will be associated higher expenses for publications, information dissemination, proposal review, legal and procurement services, technical and business expert consulting services, and project management due to overall program growth. For example, the large number of active projects will require a dedicated legal and contracts support staff to process the new awards and the many yearly renewals of cooperative agreements. Additional scientists and engineers will also be needed to manage the larger number of projects.

Economic Impacts:

The capability of the Nation's businesses to capture economic returns from scientific and technological innovations, is today, recognized as one of the most important determinants of long-term economic growth and international competitiveness. To be successful in global markets, U.S. businesses must gain the important advantages of early market penetration by commercializing more rapidly the results of applied research. To capture the efficiency gained from multiple-market applications, i.e., to achieve "economies of scope," it is important that the research be undertaken with a broad set of eventual uses in mind. By helping to reduce technological risks, and by facilitating technology transfer, the ATP will assist industry to commercialize research results more rapidly and more broadly, and to avoid missing opportunities with high payoff for the U.S.

Cost and Benefits:

With funding of $132,000,000 per year, NIST will provide near-term and long-term results of benefit to industry. Based on an independent survey of the interim results of the first eleven ATP projects initiated in fiscal year 1991, there are substantial indications of early benefits. These benefits include: (1) ability to afford and engage in high-risk, long-term research; (2) change in research direction; (3) further development of technology previously funded by these organizations; (4) time savings of one to five years; (5) creation of new high paying jobs in their organizations; (6) engagement in research collaboration and strategic alliances; (7) improved competitive standings in the market place; and (8) strengthened linkages between sectors -- industry - government and industry - university or within sectors.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Extramural programs
Subactivity: Advanced technology program
Investment Program: Advanced technology program expansion

Title	Grade	Number	Annual Salary	Total Salaries
Biotechnologist	15	3	$66,609	$199,827
Computer scientist	15	1	66,609	66,609
Electrical engineer	15	2	66,609	133,218
General physical scientist	15	2	66,609	133,218
Mechanical engineer	15	2	66,609	133,218
Metallurgist	15	1	66,609	66,609
Physicist	15	1	66,609	66,609
Economist	14	1	56,627	56,627
Materials research engineer	14	2	56,627	113,254
Physicist	14	2	56,627	113,254
Research chemist	14	1	56,627	56,627
Attorney	13	1	47,920	47,920
Business specialist	13	1	47,920	47,920
Program analyst	13	1	47,920	47,920
Technical information specialist	12	1	40,298	40,298
Attorney	11	1	33,623	33,623
Economist	11	2	33,623	67,246
Grants specialist	11	2	33,623	67,246
Public affairs specialist	11	1	33,623	33,623
Writer/editor	11	1	33,623	33,623

Title		Grade	Number	Annual Salary	Total Salaries
Administrative officer		9	2	27,789	55,578
Administrative/technical support		9	7	27,789	194,523
Computer specialist		9	1	27,789	27,789
Contract specialist		9	3	27,789	83,367
Physical science technician		9	1	27,789	27,789
Writer/editor		9	1	27,789	27,789
Administrative assistant		7	2	22,717	45,434
Grant assistant		7	2	22,717	45,434
Secretary		7	2	23,474	46,948
Technical information assistant		7	1	22,717	22,717
Secretary		6	5	21,805	109,025
Clerk typist		5	2	20,173	40,346
Secretary		5	2	20,173	40,346
Clerk		3	2	14,603	29,206
Subtotal			62		2,354,780
Less lapse	13 %		(8)		(313,601)
Total full–time permanent (FTE)			54		2,041,179

Personnel Data	
Full–Time Equivalent Employment:	
Full–time permanent	54
Authorized Positions:	
Full–time permanent	62

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Extramural programs
Subactivity: Advanced technology program
Investment Program: Advanced technology program expansion

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full–time permanent	$2,042	$2,042
11.9	Total personnel compensation	2,042	2,042
12.1	Civilian personnel benefits	592	592
21	Travel and transportation of persons	422	422
22	Transportation of things	231	231
23.3	Communications, utilities and miscellaneous charges	594	594
24	Printing and reproduction	310	310
25.2	Other services	12,091	12,091
26	Supplies and materials	681	681
31	Equipment	699	699
32	Land and structures	0	0
41	Grants, subsidies and contributions	112,475	112,475
99	Direct obligations	130,137	130,137
	Transfer to NIST Working Capital Fund		1,863
	Total increase requested		132,000

Advanced Technology Program
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Other	$897	$924	$952
Subtotal, Department of Defense	897	924	952
Total, Other Agency	897	924	952
Total, Reimbursable Program	897	924	952

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Extramural programs
Subactivity: Technology transfer and outreach

		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
Line Item		Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Manufacturing extension partnership	Pos./BA	0	$15,070	9	$16,907	14	$18,235	23	$30,235	9	$12,000
	FTE/Obl.	0	16,735	9	18,667	14	18,235	21	30,175	7	11,940
State technology extension program	Pos./BA	3	1,280	5	1,280	0	0	0	0	0	0
	FTE/Obl.	2	460	5	2,293	0	0	0	0	0	0
Quality program	Pos./BA	0	0	0	0	19	800	23	2,800	4	2,000
	FTE/Obl.	0	0	0	0	19	800	21	2,729	2	1,929
Total	Pos./BA	3	16,350	14	18,187	33	19,035	46	33,035	13	14,000
	FTE/Obl.	2	17,195	14	20,960	33	19,035	42	32,904	9	13,869

Exhibit 11

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Extramural programs
Subactivity: Technology transfer and outreach

	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
Line Item	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount	Per– sonnel	Amount
Manufacturing extension partnership										
WCF transfers	0	0	0	0	0	0	0	$60	0	$60
Reimbursable FTE/Obl	0	0	0	$361	0	$372	0	372	0	0
Total	0	0	0	361	0	372	0	432	0	60
Quality outreach program										
WCF transfers	0	0	0	0	0	0	0	71	0	71
Reimbursable FTE/Obl	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	71	0	71
Total										
WCF transfers	0	0	0	0	0	0	0	131	0	131
Reimbursable FTE/Obl	0	0	0	361	0	372	0	372	0	0
Total	0	0	0	361	0	372	0	503	0	131

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
TECHNOLOGY TRANSFER AND OUTREACH

Goal Statement

The goal of this subactivity is to enhance the competitiveness of American industry by diffusing technological advances to users in all segments of the American economy and to emphasize a commitment to quality by U.S. businesses.

Base Program

The Manufacturing Extension Partnership (MEP) provides shared-risk financial assistance combined with opportunities for cooperating with NIST and other technology services to transfer technologies that can improve U.S. manufacturing capabilities at all stages of technological sophistication. The MEP program is an effort to advance the state of existing manufacturing by transferring government developed and advanced commercial technologies by working directly with firms in a region on their technology-related problems.

The MEP works to improve American manufacturing competitiveness by advancing the level of manufacturing technology used in small- and medium-sized U.S. - based firms. There are two fully operational outreach components: the Manufacturing Technology Centers (MTC) program and the State Technology Extension Program (STEP).

The central activity of an MTC is working hands-on with groups of smaller firms with common needs to understand their particular manufacturing requirements, introduce them to technologies and techniques which will improve quality and efficiency, and inform them of places to obtain professional assistance in implementing new technologies and practices. The MTC programs accelerate the adoption of more advanced technologies by smaller manufacturers. The MTCs have been widely evaluated as successful in addressing the needs of the target firms which are within their region of coverage.

The STEP program awards grants to the states to provide technical assistance to plan and implement new state extension services. In addition the program organizes workshops, training and studies to strengthen state extension services and facilitates communication between state and federal technology sources.

Planning is underway for two additional outreach activities:

- Manufacturing Outreach Centers (MOC) which focus on service delivery to client firms that are out of reach of an MTC (an MOC may be affiliated with an existing MTC or stand alone), and
- a linking/network program, which will bring federal agency and technical assistance programs together to avoid duplication and improve accessibility of these services to MTC and MOC client firms.

Fiscal year 1994 operating objectives include the following:

- develop technology transfer tools which strengthen the activities of the MTCs and minimize redundant development at individual sites;
- form linkages with each cabinet-level government agency for the purpose of coordinating programs;
- conduct the required third-year review of the second group of MTCs, and
- build a seamless fabric for service delivery, integrating MTCs, MOCs, and state and local technology extension organizations.

Quantitative Performance Measures

	FY 1993[1]	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
o Number of Centers operating with Federal funding	7	7	7	7	7	7
o Number of companies involved	10,500	10,500	10,500	10,500	10,500	10,500
o Number of states involved	21	21	21	21	21	21
o Number of new STEP grants awarded	6	6	6	6	6	6

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[1] Changes between FY 1993 and FY 1994 do not reflect initiative funding.

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing extension partnership	Pos./BA	14	$18,235	23	$30,235	9	$12,000
	FTE/Obl.	14	18,235	21	30,175	7	11,940

Investment Program: Manufacturing extension partnership (9 Permanent positions, BA +$12,000,000, Direct Obligations +$11,940,000, Transfer to WCF +$60,000) - The Manufacturing Extension Partnership (MEP) provides the structure for an effective national program of continuous technological advancement for America's small- and medium-sized manufacturers by facilitating the utilization of advanced technology and promoting entrepreneurship, Industrial Innovation, and reducing barriers to commercialization.

Problem Magnitude and Scope:

America's small- and medium-sized manufacturing enterprises are the backbone of the U.S. industrial base, contributing roughly 50 percent of the total value-added to U.S. manufactured products. These businesses represent approximately 95 percent of all U.S. manufacturing establishments, and account for over 75 percent of new manufacturing jobs. In the last few years, studies by GAO, the National Governors' Conference, and the Office of Technology Assessment have found that individual small manufacturers are unable to understand and access new technological opportunities, the skilled workforce necessary to utilize advanced technologies must be trained, and the limited availability of low-cost capital has largely prevented small- and medium-sized manufacturing firms from adopting advanced manufacturing technologies and techniques. These factors have contributed to the erosion of the U.S. capital and durable goods supplier base and, consequently, to a declining U.S. industrial competitiveness overall. A National Governors' Association study[1] concludes that direct contact with these companies through extension-like activities are crucial to overcoming the barriers of adopting advanced technology and are outside the realm of services which private consultants can reasonably be expected to provide.

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[1] Increasing the Competitiveness of America's Manufacturers: A Review of State Industrial Extension Programs, National Governors' Association, Center for Policy Research, 1991.

Why NIST:

In Vision of Change for America, President Clinton calls for the establishment by NIST of "over 100 manufacturing extension centers nationwide by 1997 to assist manufacturers to modernize their production capability." This plan is reiterated in Technology for America's Economic Growth, in which the President and Vice President call for the creation of a national network of manufacturing extension centers. Implementation of this national network would create a single, integrated program, the Manufacturing Extension Partnership (MEP), coupling the existing Manufacturing Technology Centers (MTCs) and the State Technology Extension Program (STEP), with new Manufacturing Outreach Centers (MOCs), and a linking/networking function (LINKS) which establishes the interconnections and common services which bring the separate organizations together into a national system. NIST has the technical expertise in manufacturing and the history of close cooperation with industry crucial to implementing a broader, more effective, more comprehensive program.

Description of the Proposed NIST Technical Program:

The Manufacturing Extension Partnership builds on the experience gained in the MTC and STEP programs, adding two new components to increase outreach and concentrate on coordination and infrastructure development efforts. These efforts are aimed at facilitating the provision of services to small- and medium-sized firms.

In 1994, this initiative will increase by two (2) the number of MTCs, bringing to nine (9) the total number in operation, increase the availability of STEP support to a total of 25 states, and begin 8 Manufacturing Outreach Centers and the functions devoted to coordinating and increasing the effectiveness of all Federal activities aimed at aiding small manufacturers. In the event that ARPA implements Title IV of the Defense Conversion Reinvestment and Transition Act of 1992, NIST may manage appropriate proposals which may result in changes in the mix of MTCs and MOCs funded. The President's budget includes substantial growth for MEP, rising to $92 million by 1997 by which time there will be 19 MTCs, 48 MOCs, and 30 grants to states for planning and implementation of state-based programs.

In concert with the MTC effort, MOCs will focus on service delivery to client firms that are out of reach of an MTC. In general, they will be organized as programs within existing technical or training institutions such as community colleges, technical colleges, vocational institutions, university manufacturing centers, or state technical assistance centers. MOCs may be closely affiliated with a host MTC (as a satellite), relying both on its own internal technical management resources and on the strength of the linkages with the host MTC, or may be free-standing, obtaining their technology and management input from sources with which they have linkages and from the linking/network function of MEP.

In coordination with the MTCs and MOCs, STEP will help states build a fabric of state-provided services and linkages. NIST will provide technical support and funding to a small number of states to explore the best way to help states develop this fabric. The program will enable NIST staff members to work with state planners to improve their access to Federal sources of information and federal funding programs related to manufacturing extension. This program is designed to coordinate and increase the efficiency and effectiveness of all Federal activities aimed at helping small manufacturers overcome barriers to technology utilization.

There are a variety of programs throughout the federal government intended to strengthen the competitiveness of small- and medium-sized manufacturing firms. The MEP will identify and establish LINKS with all of these programs in order to avoid duplication and improve the accessibility of federal services to these firms. Examples of initial linkages include ties with the Department of Labor for workforce training and with the Small Business Administration for loan guarantees to MTC client firms. NIST has agreements with the Department of Energy Laboratories at Sandia and Y-12 at Oak Ridge and with Department of Defense Centers of Excellence for those facilities to serve as technology sources for the extension network. Other linkages have been developed with the Environmental Protection Agency, U.S. Air Force, and U.S. Navy for technology transfer.

Economic Impacts:

The MTC program now collects data on a uniform basis to measure the outcomes of projects performed for small- and medium-sized companies. The measures employed assess actual outcomes, not process variables, including job creation, increase in sales, increase in exports, reduction in process waste (scrap), and increase in productivity. In the development and prove-out of this uniform evaluation system, pilot tests were run by MTCs in New York and Ohio, with the result that MTC client firms, over a 2-year period, produced a 15 percent increase in jobs, a 7 percent increase in productivity, and a 34 percent increase in sales. The data for this pilot test was collected by the MTCs from their client firms.

As producers of durable and capital goods, small- and medium-sized manufacturers contribute roughly 50 percent of the value-added in U.S. manufacturing. Thus, the competitiveness of small manufacturers provides the foundation for the competitiveness of all U.S. manufacturing. This alone could be considered sufficient to demonstrate the economic significance of strengthening their competitiveness. While metrics for measuring the performance of individual MTCs are rough, GAO has cited estimates that for every Federal dollar spent, eight additional dollars are saved or earned by industry. The efforts proposed in this initiative are intended to further increase the efficiency and leverage of Federal expenditures aimed at improving technology implementation by small manufacturers.

Costs and Benefits:

Funding of the $12,000,000 requested will enable NIST to run competitions for two (2) additional MTCs, eight (8) MOCs, begin significant new STEP planning grants for six (6) states, and support follow-on implementation grants for four states. In addition, NIST will begin development of the networking services to link NIST-funded centers, other extension centers, and technology sources which arise from other organizations. Moreover, the funding will permit integration of NIST-managed extension activities with those sponsored by other entities.

NIST has signed an MOU with ARPA, DoE/DP, NASA, and NSF to form the Defense Technology Conversion Council, which has prepared a program plan to implement Title IV of the Defense Conversion, Reinvestment and Transition Act of 1992. NIST participated as a team member in developing selection criteria, and will participate in selection of proposals to implement. NIST may then manage the execution of assigned proposals. The NIST MEP program provides the framework on which much of the extension portion of the plan was based, and the plan makes use of the very effective award and evaluation process already in place.

MEP Quantitative Performance Measures for Base and Initiative

		FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
o	Number of Centers operating with Federal funding	17	32	46	67	67
o	Number of companies involved	15,500	23,000	30,000	41,000	41,000
o	Number of states involved	30	30	36	40	40
o	Number of STEP grants awarded	25	25	30	30	30

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Extramural programs
Subactivity: Technology transfer and outreach
Investment Program: Manufacturing extension partnership

Title		Grade	Number	Annual Salary	Total Salaries
Business specialist		13	1	$47,920	$47,920
Electrical engineer		13	1	47,920	47,920
Mechanical engineer		13	1	47,920	47,920
Grants specialist		12	1	40,298	40,298
Program analyst		12	1	40,298	40,298
Network engineer		11	1	33,623	33,623
Public information specialist		11	1	33,623	33,623
Administrative/technical support		9	1	27,789	27,789
Secretary		6	1	21,805	21,805
Subtotal			9		341,196
Less lapse	25 %		(2)		(85,299)
Total full-time permanent (FTE)			7		255,897

Personnel Data		
Full-Time Equivalent Employment:		
Full-time permanent		7
Authorized Positions:		
Full-time permanent		9

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Extramural programs
Subactivity: Technology transfer and outreach
Investment Program: Manufacturing extension partnership

Object Class		1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full-time permanent	$256	$256
11.9	Total personnel compensation	256	256
12.1	Civilian personnel benefits	74	74
21	Travel and transportation of persons	106	106
22	Transportation of things	20	20
23.3	Communications, utilities and miscellaneous charges	176	176
24	Printing and reproduction	26	26
25.2	Other services	205	205
26	Supplies and materials	71	71
31	Equipment	6	6
32	Land and structures	0	0
41	Grants, subsidies and contributions	11,000	11,000
99	Direct obligations	11,940	11,940
	Transfer to NIST Working Capital Fund		60
	Total increase requested		12,000

Exhibit 13

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
INCREASE FOR FY 1994
(Dollar amounts in thousands)

		1994 Base		1994 Estimate		Increase/(Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Quality program	Pos./BA	19	$800	23	$2,800	4	$2,000
	FTE/Obl.	19	800	21	2.729	2	1,929

Quality outreach (4 Permanent positions, BA +$2,000,000, Direct Obligations +$1,929,000, Transfer to WCF +$71,000) - This increase will promote industrial technology and innovation and reduce barriers to commercialization, facilitate industry and Government efforts to improve quality, and promote entrepreneurship. NIST will capitalize on the achievements of the Malcolm Baldrige National Quality Award to provide national leadership in quality and competitiveness through government/industry partnerships designed to acquire new knowledge and develop new strategies. The program is aimed at extending U.S. competitiveness and the U.S. status in quality through quality technology development, information transfer, and extension of the Baldrige Award concept to public benefit areas.

Problem Magnitude and Scope:

Before the Baldrige Award was introduced in 1987, quality was a poorly defined concept in U.S. industry; the introduction of the Baldrige Award has fostered a major change in U.S. industry. As stated in the January-February 1992 Harvard Business Review, "not since the Soviets launched Sputnik in 1957 have U.S. corporations worked toward so singular a purpose." The U.S. is in a fight for economic survival in a global economy in which quality is a major part of the answer to remaining competitive. U.S. trade deficits, high unemployment, and a decline in real income for U.S. citizens have placed the U.S. economy in the most precarious position since World War II. International developments are creating new opportunities, as well as new competitive pressures. The European community is becoming a singular dominant market force in the world economy. Europe, in addition, has stepped up its emphasis on quality. Japan remains a leader in industrial competitiveness and in quality. Mexico and South America are moving quickly to establish national support programs in quality. Success in the future will depend more than ever on quality, speed and cost.

The health care industry, which currently accounts for 13 percent of the U.S. GDP, is suffering in quality from the patient's perspective; and the cost of health care is hindering U.S. industries' ability to remain competitive. Our education system needs revitalization if it is to prepare adults with an education comparable to that being achieved in our nation's chief economic competitors. Lessons learned from total quality management in industry offer opportunities for translation to our education and health care systems.

Why NIST:

NIST has become the focal point for quality in the U.S. NIST was assigned the responsibility of managing the Malcolm Baldrige National Quality Award by P.L. 100-107. U.S. industry views the Baldrige Award criteria as the most useful diagnostic tool for evaluating the effectiveness of management practices. One indication of the interest in the Baldrige Award and in its interpretation of total quality management is that over 125,000 copies of the award criteria were distributed in 1992.

The Omnibus Trade and Competitiveness Act, which established NIST from the former National Bureau of Standards, assigns to NIST a major responsibility for enhancing the competitiveness of American industry. A key tool in this competitiveness is quality. Organizations throughout the country are now turning to NIST for leadership in quality activities. These organizations represent all industrial sectors in the U.S., as well as key non-profit sectors, such as health care and education. Secretary Brown stated at the Quest for Excellence V Conference that the Administration is committed to quality improvement generally and to the Award program specifically.

Description of the Proposed NIST Technical Program:

This initiative will support expanded quality outreach efforts by administering the Malcolm Baldrige National Quality Award, with its full implications in training quality leaders and assessors and providing feedback on quality improvement practices. Expansion and adaptation of quality principles into the education and health care arenas will be explored in this budget initiative. For U.S. industry to capitalize more effectively on science and technology research, avenues will be explored for applying quality principles to research and development activities, including process measurement and control, design of experiments, and laboratory-based metrology.

Economic Impacts:

Quality must transform U.S. industry if it is to remain competitive. Industry is receiving the message. Companies are using the Baldrige criteria in massive self-improvement programs. The impact of the award is spreading well beyond those who actually submit an application. As part of a GAO study published in May 1991, the Baldrige-related quality practices of 20 companies in the U.S. were examined. In eight of nine companies examined on overall employee satisfaction, an increase was demonstrated. In an examination of operating procedures, reliability improved by an annual average of 11.3 percent for the 12 companies providing data. Six of seven reporting companies shortened their product lead time. For all nine companies reporting data on cost savings from quality improvement efforts, there was an increase in savings. The average annual cost savings attributed to employee suggestions ranged from $1.3 million to $116 million per year. Overall customer satisfaction increased for 12 of 14 reporting companies, and was unchanged at a high level in the remaining two companies. Thus, the economic impacts of quality improvement are well documented in the above report and in other reports. Adoption of the Baldrige Award criteria has repeatedly resulted in major gains in productivity. Much can yet be done via partnerships to extend lessons learned to all sectors of the U.S. economy, including the not-for-profit sector. Adaptation of award criteria to health care and education have the potential for providing equally striking results to the ones quoted above.

Cost and Benefits:

With funding of $2,000,000 requested per year, NIST will provide both near-term and long-term results of benefit to industry. In the first year of funding under this initiative, it is anticipated that enhanced technology transfer mechanisms for sharing winning industrial strategies would be put in place. By the end of the second year, initial case studies and quality evaluation criteria would be available for testing by health and education institutions. During year three, mechanisms for conducting discussions within the health care and education communities on of the test quality evaluation criteria would be developed.

Exhibit 14

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Extramural programs
Subactivity: Technology transfer and outreach
Program Change: Quality outreach

Title	Grade	Number	Annual Salary	Total Salaries
Director	ES-4	1	$107,300	$107,300
Deputy director	ES-4	1	107,300	107,300
Economist	15	1	83,531	83,531
General engineer	15	1	84,982	84,982
General physical scientist	15	2	86,592	173,184
Administrative specialist	14	1	56,627	56,627
Chemist	14	1	67,982	67,982
Computer systems analyst	13	1	62,901	62,901
Program analyst	13	1	47,920	47,920
Technical information specialist	12	2	43,337	86,674
Administrative/technical support	9	2	27,789	55,578
Secretary	9	1	39,783	39,783
Administrative support assistant	7	1	25,249	25,249
Secretary	7	1	32,710	32,710
Writer/editor	7	1	22,717	22,717
Secretary	6	2	21,338	42,676
Administrative support assistant	5	2	23,153	46,306

Title		Grade	Number	Annual Salary	Total Salaries
Clerk typist		3	1	14,603	14,603
Subtotal			23		1,158,022
Less transfer from STRS appropriation			(7)		(392,354)
Less transfer from Working Capital Fund			(12)		
Total			4		765,668
Less lapse	10 %		(2)		(76,567)
Total full–time permanent (FTE)			2		689,101

Personnel Data	
Full–Time Equivalent Employment:	
Full–time permanent	2
Authorized Positions:	
Full–time permanent	4

Exhibit 15

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity Extramural programs
Subactivity: Technology transfer and outreach
Program Change: Quality outreach

	Object Class	1994 Increase/ (Decrease) Obligations	1994 Increase/ (Decrease) Budget Authority
11	Personnel compensation		
11.1	Full-time permanent	$689	$689
11.9	Total personnel compensation	689	689
12.1	Civilian personnel benefits	200	200
21	Travel and transportation of persons	154	154
22	Transportation of things	16	16
23.3	Communications, utilities and miscellaneous charges	171	171
24	Printing and reproduction	17	17
25.2	Other services	530	530
26	Supplies and materials	120	120
31	Equipment	32	32
32	Land and structures	0	0
41	Grants, subsidies and contributions	0	0
99	Direct obligations	1,929	1,929
	Transfer to NIST Working Capital Fund		71
	Total increase requested		2,000

Technology Transfer and Outreach
REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollars in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Other	0	361	372
Total, Other Agency	0	361	372
Total, Reimbursable Program	0	361	372

Exhibit 16

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation					
11.1	Full–time permanent	$963	$5,676	$4,939	$7,926	$2,987
11.3	Other than full–time permanent	79	385	299	299	0
11.5	Other personnel compensation	14	20	20	20	0
11.9	Total personnel compensation	1,056	6,081	5,258	8,245	2,987
12.1	Civilian personnel benefits	199	1,247	1,131	1,997	866
13	Benefits for former personnel	1	6	6	6	0
21	Travel and transportation of persons	108	502	435	1,117	682
22	Transportation of things	26	170	129	396	267
23.2	Rental payments to others	10	34	34	134	100
23.3	Communications,utilities, and miscellaneous charges	113	642	611	1,452	841
24	Printing and reproduction	6	60	64	417	353
25.2	Consulting services	430	327	550	550	0
25.3	Other services	1,013	4,453	3,209	16,035	12,826
26	Supplies and materials	132	986	831	1,703	872
31	Equipment	203	313	266	1,003	737
32	Lands and structures	2	0	0	0	0
41	Grants, subsidies and contributions	54,246	116,377	74,000	197,475	123,475
42	Insurance claims and indemnities	0	0	0	0	0
99	Total obligations	57,545	131,198	86,524	230,530	144,006
	Transfer to NIST Working Capital Fund			0	1,994	1,994
	Total Requirements			86,524	232,524	146,000

Personnel Data	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Full-time equivalent employment:					
Full-time permanent	18	89	110	173	63
Other than full-time permanent	2	9	10	10	0
Total	20	98	120	183	63
Authorized Positions:					
Full-time permanent	18	91	110	185	75
Other than full-time permanent	3	11	12	12	0
Total	21	102	122	197	75

Exhibit 17

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	0	0	0	0
	Senior executive service	214	613	613	0
	General schedule	198	4,326	7,313	2,987
	Wage board	0	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0	0
	Subtotal	412	4,939	7,926	2,987
11.3	Other than full-time permanent				
	General schedule	0	299	299	0
	Wage board	0	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0	0
	Experts & consultants	0	0	0	0
	Student	0	0	0	0
	Subtotal	0	299	299	0
11.5	Other personnel compensation				
	Overtime	0	10	10	0
	SES performance awards	0	0	0	0
	Cash awards	0	10	10	0
	Merit pay awards	0	0	0	0
	Other	0	0	0	0
	Subtotal	0	20	20	0
11.9	Total personnel compensation	412	5,258	8,245	2,987

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits				
	Civil service retirement	(1)	169	169	0
	Federal employees' retirement	55	326	712	386
	Thrift savings plan	12	119	211	92
	Federal Insurance Contribution Act	32	267	495	228
	Health insurance	25	199	346	147
	Life insurance	2	18	31	13
	Employees' Compensation Fund	0	33	33	0
	Other	0	0	0	0
	Subtotal	125	1,131	1,997	866
13	Benefits for former personnel				
	Severance pay	0	4	4	0
	Unemployment compensation	0	2	2	0
	Other	0	0	0	0
	Subtotal	0	6	6	0
21	Travel and transportation of persons				
	Common carrier	(1)	178	453	275
	Mileage	(1)	10	28	18
	Per diem/actual	5	191	479	288
	Other	0	56	157	101
	Subtotal	3	435	1,117	682
22	Transportation of things	3	129	396	267
23.2	Rental payments to others	0	34	134	100

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
23.3	Communications, utilities, and miscellaneous charges				
	Rental of ADP equipment	0	0	41	41
	Rental of office copying equipment	4	43	119	76
	Other equipment rental	3	41	142	101
	Federal telecommunications system	4	19	44	25
	Other telecommunications services	11	57	137	80
	Postal Service by USPS	8	36	84	48
	Utilities:				
	Electric	68	291	613	322
	Gas	18	75	167	92
	Water/Sewer	12	49	105	56
	Subtotal	128	611	1,452	841
24	Printing and reproduction				
	Publications	9	46	315	269
	Other	1	18	102	84
	Subtotal	10	64	417	353
25.1	Consulting services	0	550	550	0
25	Other services				
	Training:				
	Office of Personnel Management	0	0	0	0
	Other	2	12	35	23
	Maintenance of equipment	8	84	122	38
	ADP Services	5	38	71	33
	Payments to GA, WCF	1	89	89	0
	Other Federal agencies:				
	Dept. of Commerce	52	161	2,701	2,540
	Other	4	928	1,602	674
	Other non-government contracts	(358)	1,897	11,415	9,518
	Subtotal	(286)	3,209	16,035	12,826

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
26	Supplies and materials				
	Office & laboratory supplies	45	736	1,608	872
	Scientific publications & journals	0	4	4	0
	Fuel oil	0	84	84	0
	Reactor Fuel	0	7	7	0
	Subtotal	45	831	1,703	872
31	Equipment				
	Office machines and other equipment	10	70	683	613
	ADP equipment	7	22	146	124
	Equipment depreciation	0	174	174	0
	Subtotal	17	266	1,003	737
32	Lands and structures	0	0	0	0
41	Grants, subsidies and contributions	0	74,000	197,475	123,475
42	Insurance claims and indemnities	0	0	0	0
99	Total Obligations	457	86,524	230,530	144,006
	Transfer to NIST Working Capital Fund	0	0	1,994	1,994
	Total Requirements	457	86,524	232,524	146,000

Exhibit 18

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 1–1993 Structure
(Dollar amounts in thousands)

Activity/Subactivity	1994 Direct Obligations	Proposed Changes
Extramural programs		
Technology development and transfer mechanisms	$230,530	Divide current subactivity into: 1. Advanced technology program 2. Technology transfer and outreach Transfer $197,626,000 to the Advanced technology program. Transfer $32,904,000 to Technology transfer and outreach.

Exhibit 19

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 2–1994 Structure
(Dollar amounts in thousands)

Activity/Subactivity	Amounts				
	1990	1991	1992	1993	1994
Extramural programs:					
Advanced technology program	0	$554	$40,350	$110,238	$197,626
Technology transfer and outreach	0	9,582	17,195	20,960	32,904
Total Direct Obligations	0	10,136	57,545	131,198	230,530

Exhibit 32

Department of Commerce
National Institute of Standards and Technology

Industrial Technology Services
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

1. After the words "For necessary expenses of the," delete the words "Regional Centers for the Transfer of Manufacturing Technology, and" and insert the words "Manufacturing Extension Partnership."

   The Manufacturing Technology Centers and State Extension Services Programs are being combined under the title of the Manufacturing Extension Partnership.

2. After the words "Advanced Technology Program," delete the words "and, not withstanding any other provisions of law, State Extension Services Program" and insert the words "and the Quality Outreach Program."

   The State Extension Services Program is being combined under the Manufacturing Extension Partnership and the Quality Outreach Program is being transferred from the STRS appropriation.

3. After the words "to remain available until expended," insert the words "of which not to exceed $71,000 may be transferred to the Working Capital Fund."

   Authority to transfer funds to the Working Capital Fund must be included in the appropriation language.

4. Additional language has been added to address the Administration's investment request.

Exhibit 33

Department of Commerce
National Institute of Standards and Technology

Industrial Technology Services
APPROPRIATION LANGUAGE AND CODE CITATION

1. For necessary expenses of the Manufacturing Extension Partnership, the Advanced Technology Program, and the Quality Outreach Program of the National Institute of Standards and Technology,

15 U.S.C. 278k, 278l, 278n

15 U.S.C. 278k directs the Secretary, through the Director of NIST, to provide assistance for the creation of Regional Centers for the Transfer of Manufacturing Technology.

15 U.S.C. 278l directs the Secretary, through the Director of NIST or other appropriate officials, to provide technical assistance to State technology programs.

15 U.S.C. 278n establishes in the Institute (NIST) an Advanced Technology Program.

2. $88,524,000, to remain available until expended,

no specific authority

31 U.S.C. 718 - Appropriations in annual Appropriation Acts not permanent, states: "No specific or indefinite appropriations... shall be construed to be permanent or available continuously... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriations Act in which it is contained makes provision."

3. of which not to exceed $71,000 may be transferred to the "Working Capital Fund."

15 U.S.C. 278b

15 U.S.C. 278b provides in part: "The National Institute of Standards and Technology is authorized to utilize in the performance of its functions the Working Capital Fund..."

4. In addition to amounts otherwise available under this heading, and subject to the same terms and conditions, $144,000,000 to remain available until expended, of which not to exceed $1,923,000 may be transferred to the "Working Capital Fund."

Additional authorizing legislation will be proposed for FY 1994.

Exhibit 34

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
Industrial Technology Services
CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1992 Actual	FY 1993 Estimate	FY1994 Estimate
Management and Professional Services	$430	$327	$550
Total	430	327	550

Significant Activities

ITS consulting and related services are concerned with a review and evaluation of applicants for grants associated with the Advanced Technology Program (ATP) and the Manufacturing Extension Program (MEP).

Explanation of Funding Level Changes:

The FY 1994 funding level for ITS management and professional support services reflects an increase in required services due to the proposed increase in the level of the ATP program and the MEP program.

Need for Consulting Services:

The need for consulting and related services stems from the NIST role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its program plans to meet the needs of its customers. The alternative to utilizing these services is to make no attempt to have expertise from sources outside NIST and risk having a poorer working and professional relationship with those in the business of using the products and services offered by NIST.

Internal Controls to Ensure Appropriate Use:

Requisition requests from NIST program managers for advisory and assistance services must be accompanied by written justification for the need for such services. Personal services contracts require review by the Personnel Office.

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar Amounts in thousands)

Page No.		Positions	Budget Authority	FTE	Direct Obligations
	Amount available for FY 1993 as shown in 1994 President's Budget		$99,750		$99,750
	plus: Dec. 17, 1992 Proposed Transfers–not implemented(P.L.102–395)		4,000		4,000
	Amount Currently Available, 1993		103,750		103,750
	plus: Transfers implemented(P.L.102–395)		1,250		1,250
	Appropriation, 1993		105,000		105,000
NIST–195	plus: 1994 Adjustments to base	5	(43,314)	5	(43,314)
	1994 Base	5	61,686	5	61,686
	plus: 1994 Investments	0	0	0	0
	plus: Other 1994 program changes	0	0	0	0
	1994 Estimate	5	61,686	5	61,686

Page No.			1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
	Comparison by activity:		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
	Construction and major renovations											
NIST–197	Construction and major renovations	Pos./BA	0	0	0	$103,750	5	$61,686	5	$61,686		$0
		FTE/Obl.	0	0	0	103,750	5	61,686	5	61,686		0
	Adjustments to obligations:											
	Unobligated balance, start of year			0		0		0		0		0
	Unobligated balance, end of year			0		0		0		0		0
	Financing from transfers:											
	Transfer to other accounts			0		1,250		0		0		0
	Appropriation			0		105,000		61,686		61,686		0

Exhibit 7

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Total Obligations	0	$103,750	$61,686	$61,686	0
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non–Federal sources	0	0	0	0	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	0	103,750	61,686	61,686	0
Financing:					
Transfer to other accounts	0	1,250	0	0	0
Appropriation	0	105,000	61,686	61,686	0

Exhibit 8

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Increase/(Decrease)		
	Perm. Pos.	FTE	Amount
Transfers:			
Architectural and engineering transfer	5	5	$5,000
Adjustments:			
Facilities savings	0	0	(48,314)
Total, adjustments to base	5	5	(43,314)

Exhibit 9

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Transfers:		
Architectural and engineering transfer	5	$5,000

A transfer of $5,000,000 and 5 FTEs from the STRS appropriation to the CRF appropriation is requested. This funding is for architectural and engineering design required for NIST's facilities upgrade and expansion program and is being transferred to the CRF appropriation to consolidate all activities related to the facilities expansion program.

	FTE	Amount
Adjustments:		
Facilities savings	0	(48,314)

Beginning in FY 1994, the Facilities architectural and engineering design will be funded by the CRF appropriation allowing a reduction of $5,000,000. In addition, the procurement schedule for the facilities upgrade and expansion program will allow a one-time reduction of $43,314,000 in FY 1994. In FY 1995 through FY 1998, the facilities base level will revert to a steady state of $105,000,000 plus inflationary adjustments.

Exhibit 10

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Construction and major renovations
Subactivity: Construction and major renovations

Line Item		1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
Construction and major renovations	Pos./BA	0	0	0	$103,750	5	$61,686	5	$61,686	0	0
	FTE/Obl.	0	0	0	103,750	5	61,686	5	61,686	0	0

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
JUSTIFICATION OF PROGRAM AND PERFORMANCE
CONSTRUCTION AND MAJOR RENOVATIONS

Goal Statement

This program supports all NIST activities by providing the staff with the facilities necessary to carry out the technical work that supports the promoting of industrial technology and innovation, reducing barriers to commercialization, facilitating industry and government efforts to improve quality, and pursuing sustainable growth.

Base Program

Resources in this program are utilized in Gaithersburg, MD, and Boulder, CO, to improve operational capabilities of NIST facilities. This is a multi-year effort to construct Advanced Technologies Laboratories and to renovate NIST's current buildings and laboratory facilities in compliance with more stringent science and engineering program requirements.

FY 1994 base program operating objectives include the following:

o Continue the design work leading towards construction of new facilities.

o Continue the projects necessary to ensure that the infrastructure is at a level which will support new construction.

Exhibit 16

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation					
11.1	Full-time permanent	0	0	$219	$219	0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	0	0	0	0	0
11.9	Total personnel compensation	0	0	219	219	0
12.1	Civilian personnel benefits	0	0	64	64	0
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	0	0	11	11	0
22	Transportation of things	0	0	0	0	0
23.2	Rental payments to others	0	0	5	5	0
23.3	Communications,utilities, and miscellaneous charges	0	0	38	38	0
24	Printing and reproduction	0	0	2	2	0
25.1	Consulting services	0	0	0	0	0
25.2	Other services	0	10,500	10,125	10,125	0
26	Supplies and materials	0	0	16	16	0
31	Equipment	0	0	20	20	0
32	Lands and structures	0	93,250	51,186	51,186	0
41	Grants, subsidies and contributions	0	0	0	0	0
42	Insurance claims and indemnities	0	0	0	0	0
99	Total obligations	0	103,750	61,686	61,686	0
	Transfer to NIST Working Capital Fund	0	0	0	0	0
	Total Requirements	0	103,750	61,686	61,686	0

Personnel Data	1992 Estimate	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease)
Full-time equivalent employment:					
Full-time permanent	0	0	5	5	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	5	5	0
Authorized Positions:					
Full-time permanent	0	0	5	5	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	5	5	0

Exhibit 17

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
11	Personnel compensation				
11.1	Full-time permanent				
	Executive level	0	0	0	0
	Senior executive service	0	0	0	0
	General schedule	$219	$219	$219	0
	Wage board	0	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0	0
	Subtotal	219	219	219	0
11.3	Other than full-time permanent				
	General schedule	0	0	0	0
	Wage board	0	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0	0
	Experts & consultants	0	0	0	0
	Student	0	0	0	0
	Subtotal	0	0	0	0
11.5	Other personnel compensation				
	Overtime	0	0	0	0
	SES performance awards	0	0	0	0
	Cash awards	0	0	0	0
	Merit pay awards	0	0	0	0
	Other	0	0	0	0
	Subtotal	0	0	0	0
11.9	Total personnel compensation	219	219	219	0

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits				
	Civil service retirement	0	0	0	0
	Federal employees' retirement	29	29	29	0
	Thrift savings plan	7	7	7	0
	Federal Insurance Contribution Act	17	17	17	0
	Health insurance	10	10	10	0
	Life insurance	1	1	1	0
	Employees' Compensation Fund	0	0	0	0
	Other	0	0	0	0
	Subtotal	64	64	64	0
13	Benefits for former personnel				
	Severance pay	0	0	0	0
	Unemployment compensation	0	0	0	0
	Other	0	0	0	0
	Subtotal	0	0	0	0
21	Travel and transportation of persons				
	Common carrier	4	4	4	0
	Mileage	0	0	0	0
	Per diem/actual	5	5	5	0
	Other	2	2	2	0
	Subtotal	11	11	11	0
22	Transportation of things	0	0	0	0
23.2	Rental payments to others	5	5	5	0

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
23.3	Communications, utilities, and miscellaneous charges				
	Rental of ADP equipment	0	0	0	0
	Rental of office copying equipment	1	1	1	0
	Other equipment rental	1	1	1	0
	Federal telecommunications system	2	2	2	0
	Other telecommunications services	4	4	4	0
	Postal Service by USPS	2	2	2	0
	Utilities:				
	Electric	19	19	19	0
	Gas	6	6	6	0
	Water/Sewer	3	3	3	0
	Subtotal	38	38	38	0
24	Printing and reproduction				
	Publications	2	2	2	0
	Other	0	0	0	0
	Subtotal	2	2	2	0
25.1	Consulting services	0	0	0	0
25.2	Other services				
	Training:				
	Office of Personnel Management	0	0	0	0
	Other	1	1	1	0
	Maintenance of equipment	7	7	7	0
	ADP Services	2	2	2	0
	Payments to GA, WCF	0	0	0	0
	Other Federal agencies:				
	Dept. of Commerce	18	18	18	0
	Other	1	1	1	0
	Other non–government contracts	(404)	10,096	10,096	0
	Subtotal	(375)	10,125	10,125	0

	Object Class	1994 Adjustments to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
26	Supplies and materials				
	Office & laboratory supplies	16	16	16	0
	Scientific publications & journals	0	0	0	0
	Fuel oil	0	0	0	0
	Reactor Fuel	0	0	0	0
	Subtotal	16	16	16	0
31	Equipment				
	Office machines and other equipment	14	14	14	0
	ADP equipment	6	6	6	0
	Equipment depreciation	0	0	0	0
	Subtotal	20	20	20	0
32	Lands and structures	(43,314)	51,186	51,186	0
41	Grants, subsidies and contributions	0	0	0	0
42	Insurance claims and indemnities	0	0	0	0
99	Total Obligations	(43,314)	61,686	61,686	0
	Transfer to NIST Working Capital Fund	0	0	0	0
	Total Requirements	(43,314)	61,686	61,686	0

Exhibit 32

Department of Commerce
National Institute of Standards and Technology

Construction of Research Facilities
JUSTIFICATION OF PROPOSED LANGUAGE CHANGES

1. After the words "For the construction of new research facilities," insert the words "including architectural and engineering design."

Architectural and engineering design was done in the Scientific and Technical Research and Services appropriation in FY 1993. In FY 1994, this function is proposed for transfer to the Construction of Research Facilities appropriation.

Exhibit 33

Department of Commerce
National Institute of Standards and Technology

Construction of Research Facilities
APPROPRIATION LANGUAGE AND CODE CITATION

1. For construction of new research facilities, including architectural and engineering design, not otherwise provided for the National Institute of Standards and Technology, as authorized by U.S.C. 278c-278e,

   15 U.S.C. 271-278e provide basic authority for the performance of the functions of the National Institute of Standards and Technology.

   15 U.S.C. 278d provides... the Secretary of Commerce is authorized to undertake such construction of buildings and other facilities... as are necessary for the proper and efficient conduct of the activities authorized herein.

   15 U.S.C. 278c provides that in the performance of the functions of the National Institute of Standards and Technology the Secretary of Commerce is authorized to undertake the following activities: ... (b) the core, maintenance, protection, repair, and alteration of Institute buildings and other plant facilities, equipment, and property; ...

2. $61,686,000, to remain available until expended,

   no specific authority

   31 U.S.C. 718 - Appropriations in annual Appropriation Acts not permanent, states "No specific or indefinite appropriations... shall be construed to be permanent or available continuously... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriations Act in which it is contained makes provision."

3. Additional Authorizing legislation will be proposed for FY 1994.

Exhibit 5

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority
Amount available for 1993 as shown in 1994 President's Budget	1,244	1,179	$876
plus: FTEs associated with 1993 supplemental requests		100	
less: Working Capital Fund transfer			(826)
less: FTE transfer to ITS appropriation	(12)	(12)	
1994 Base	1,232	1,267	50
less: FTE transfer to offset STRS program changes	(359)	(291)	
plus: Working Capital Fund transfer			8,634
1994 Estimate	873	976	8,684

Exhibit 6

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Page No.	Comparison by activity:	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
	Measurement and engineering research and standards										
NIST–26	Electronics and electrical engineering										
	WCF transfers	0	0	0	$700	0	0	0	$870	0	$870
	Reimbursable FTE/Obl	192	$16,881	186	17,389	184	$17,911	131	20,831	(53)	2,920
	Subtotal	192	16,881	186	18,089	184	17,911	131	21,701	(53)	3,790
NIST–38	Manufacturing engineering										
	WCF transfers	0	0	0	60	0	0	0	840	0	840
	Reimbursable FTE/Obl	191	24,516	184	25,252	183	26,011	140	28,941	(43)	2,930
	Subtotal	191	24,516	184	25,312	183	26,011	140	29,781	(43)	3,770
NIST–50	Chemical science and technology										
	WCF transfers	0	0	0	80	0	50	0	415	0	365
	Reimbursable FTE/Obl	187	16,962	180	18,079	179	18,646	135	17,306	(44)	(1,340)
	Subtotal	187	16,962	180	18,159	179	18,696	135	17,721	(44)	(975)
NIST–64	Physics										
	WCF transfers	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl	98	13,350	95	13,845	94	14,135	74	13,535	(20)	(600)
	Subtotal	98	13,350	95	13,845	94	14,135	74	13,535	(20)	(600)

Page No.	Comparison by activity:	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NIST–70	Materials science and engineering										
	WCF transfers	0	0	0	0	0	0	0	650	0	650
	Reimbursable FTE/Obl	150	15,499	143	15,567	143	14,400	97	13,040	(46)	(1,360)
	Subtotal	150	15,499	143	15,567	143	14,400	97	13,690	(46)	(710)
NIST–82	Building and fire research										
	WCF transfers	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl	125	11,403	121	11,887	120	12,245	105	11,795	(15)	(450)
	Subtotal	125	11,403	121	11,887	120	12,245	105	11,795	(15)	(450)
NIST–90	Computer systems										
	WCF transfers	0	0	0	0	0	0	0	3,855	0	3,855
	Reimbursable FTE/Obl	189	18,197	183	18,744	183	19,307	142	18,147	(41)	(1,160)
	Subtotal	189	18,197	183	18,744	183	19,307	142	22,002	(41)	2,695
NIST–104	Applied mathematics and scientific computing										
	WCF transfers	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl	20	2,888	19	3,007	19	2,351	19	2,351	0	0
	Subtotal	20	2,888	19	3,007	19	2,351	19	2,351	0	0
NIST–110	Technology assistance										
	WCF transfers	0	0	0	0	0	0	0	60	0	60
	Reimbursable FTE/Obl	159	17,990	153	18,278	152	18,874	123	17,934	(29)	(940)
	Subtotal	159	17,990	153	18,278	152	18,874	123	17,994	(29)	(880)
NIST–122	Research support activities										
	WCF transfers	0	0	0	36	0	0	0	0	0	0
	Reimbursable FTE/Obl	18	6,160	15	7,026	10	6,170	10	6,170	0	0
	Subtotal	18	6,160	15	7,062	10	6,170	10	6,170	0	0

Page No.	Comparison by activity:	1992 Actual		1993 Currently Available		1994 Base		1994 Estimate		Increase/ (Decrease) Over 1994 Base	
		Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount	Per–sonnel	Amount
	Extramural Programs										
NIST–150	Advanced technology program										
	WCF transfers	0	0	0	0	0	0	0	1,863	0	1,863
	Reimbursable FTE/Obl	0	897	0	924	0	952	0	952	0	0
	Subtotal	0	897	0	924	0	952	0	2,815	0	1,863
NIST–162	Technology transfer and outreach										
	WCF transfers	0	0	0	0	0	0	0	131	0	131
	Reimbursable FTE/Obl	0	0	0	361	0	372	0	372	0	0
	Subtotal	0	0	0	361	0	372	0	503	0	131
	Total, National Institute of Standards and Technology										
	WCF transfers	0	0	0	876	0	50	0	8,684	0	8,634
	Reimbursable FTE/Obl	1,329	144,743	1,279	150,359	1,267	151,374	976	151,374	(291)	0
	Total	1,329	144,743	1,279	151,235	1,267	151,424	976	160,058	(291)	8,634

Exhibit 7

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Total Obligations	$144,743	$151,235	$151,424	$160,058	$8,634
Financing:					
Offsetting collections from:					
Federal funds	(122,709)	(116,701)	(122,038)	(122,038)	0
Non–Federal sources	(35,390)	(33,658)	(34,422)	(34,422)	0
Recoveries	0	0			
Unobligated balance, start of year	(26,015)	(41,426)	(41,426)	(41,426)	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	41,426	41,426	46,512	46,512	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	2,055	876	50	8,684	8,634
Financing:					
Transfer from other accounts	(2,055)	(876)	(50)	(8,684)	(8,634)
Appropriation	0	0	0	0	0

Exhibit 12

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Goal Statement

The Working Capital Fund (WCF) reflects the full-time equivalent (FTE) employment and dollar estimates associated with the reimbursable work performed by NIST for other agencies and the public. In addition, these estimates reflect the transfer of appropriated funds to the WCF for the purchase of depreciable equipment. The WCF contains reimbursable obligations and transfers associated with three appropriations: the Scientific and Technical Research and Services Appropriation, the Industrial Technology Services Appropriation, and the Construction of Research Facilities Appropriation.

Base Program

NIST's reimbursable services consist of technical work performed for other Federal agencies, state, and local governments, and the private sector, including calibrations and special tests, advisory services, and the sale of Standard Reference Materials. The unique measurements and standards expertise developed with appropriated funding gives NIST the capability to perform these services on a reimbursable basis. NIST accepts other agency work based on an established set of criteria which include: (1) the need for traceability of measurements to national standards; (2) the need for work which cannot or will not be addressed by the private sector; (3) work supported by legislation that authorizes or mandates certain services; (4) work which would result in an unavoidable conflict of interest if carried out by the private sector or regulatory agencies; and (5) requests by the private sector for NIST action or services.

Exhibit 16

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
11	Personnel compensation					
11.1	Full-time permanent	0	0	0	0	0
11.3	Other than full-time permanent	0	0	0	0	0
11.5	Other personnel compensation	0	0	0	0	0
11.9	Total personnel compensation	0	0	0	0	0
12.1	Civilian personnel benefits	0	0	0	0	0
13	Benefits for former personnel	0	0	0	0	0
21	Travel and transportation of persons	0	0	0	0	0
22	Transportation of things	0	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0	0	0	0
24	Printing and reproduction	0	0	0	0	0
25.1	Consulting services	0	0	0	0	0
25.2	Other services	0	0	0	0	0
26	Supplies and materials	0	0	0	0	0
31	Equipment	$2,055	$876	$50	$8,684	$8,634
32	Land and structures	0	0	0	0	0
41	Grants, subsidies, and contributions	0	0	0	0	0
42	Insurance claims and indemnities	0	0	0	0	0
99	Total Obligations	2,055	876	50	8,684	8,634

	1992 Actual	1993 Currently Available	1994 Base	1994 Estimate	Increase/ (Decrease) Over 1994 Base
Personnel Data					
Full–time equivalent employment:					
Full–time permanent	1,203	1,174	1,162	871	(291)
Other than full–time permanent	126	105	105	105	0
Total	1,329	1,279	1,267	976	(291)
Authorized Positions:					
Full–time permanent	1,274	1,244	1,232	873	(359)
Other than full–time permanent	185	149	149	149	0
Total	1,459	1,393	1,381	1,022	(359)

Exhibit 17

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	Object Class	1994 Adjustment to Base	1994 Base	1994 Estimate	Increase/ (Decrease)
31	Equipment				
	Office machines and other equipment	0	$50	$5,153	$5,103
	ADP equipment	0	0	3,531	3,531
	Equipment depreciation	0	0	0	0
	Subtotal	0	50	8,684	8,634
99	Total Obligations	0	50	8,684	8,634

Exhibit 34

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
Working Capital Fund
CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1992 Actual	FY 1993 Estimate	FY 1994 Estimate
Studies, Analysis and Evaluations	$3,357	$3,432	3,400
Management and Professional Services	1,140	1,300	1,283
Total	4,497	4,732	4,683

Significant Activities

Consulting and related services funded by the Working Capital Fund represent services funded by reimbursable funds in support of reimbursable work conducted at NIST. Significant activities include:

(1) reimbursable activities conducted in support of the review and evaluation of candidates for the Malcolm Baldrige National Quality Awards.

(2) technical and advisory services to provide to NIST/Navy Center of Excellence in Manufacturing to improve manufacturing capabilities, identify and procure best manufacturing practices, identify and document manufacturing operations which require and can derive benefit from advancements in manufacturing capabilities through government-industry cooperative projects. NIST's Automated Manufacturing Engineering Research Facility (AMRF) is funded by the Navy Manufacturing Technology Program as a Navy Center of Excellence in Manufacturing.

(3) reimbursable share of the review and evaluation of the technical functions and operations of NIST by Boards of Assessment of the National Academy of Sciences. The Evaluation Panels consider the importance and relative priority of projects, quality of staff, equipment needs, finances, and the relation of the program to the mission of NIST.

Need for Consulting Services:

The need for consulting and related services stems from the NIST role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its program plans to meet the needs of its customers. The alternative to utilizing these services is to make no attempt to have expertise from sources outside NIST and risk having a poorer working and professional relationship with those in the business of using the products and services offered by NIST.

Internal Controls to Ensure Appropriate Use:

Requisition requests from NIST program managers for advisory and assistance services must be accompanied by written justification for the need for such services. Personal services contracts require review by the Personnel Office.

Working Capital Fund, National Institute of Standards and Technology (NIST)

The operations of the NIST Working Capital Fund are reported in a program and financing schedule printed in the President's Budget, as well as reflected in the reimbursable amounts throughout this budget. The fund finances the initial costs of work performed by NIST and is reimbursed by applicable appropriations and advances or reimbursements from other agencies. A detailed cost accounting system is used to ensure that the actual cost of work performed for each job or task is recorded and identified with the appropriate source of financing. In addition to its function as a revolving fund, the Working Capital Fund is also used to handle annual and sick leave on an accrued basis, to acquire equipment as an investment to be recovered through depreciation charges to programs, to distribute indirect costs to programs as overhead, to carry the recoverable costs associated with the production of Standard Reference Materials, and to carry supply inventories until issued for program use.

The table below summarizes the total NIST program, according to the source of financing. Following this table is a summary of the NIST reimbursable program by sponsor and source of support.

Summary of Total NIST Program
(Obligations in thousands)

	FY 1992			FY 1993			FY 1994			
Source and Use of Funds Spent	Perm. Pos.[1]	FTE	Oblig.	Perm. Pos.[1]	FTE	Oblig.	Perm. Pos.[1]	FTE	Oblig.	Approp. Requested
Direct Funding										
Scientific and technical research and services	1,627	1,698	$178,633	1,696	1,800	$201,782	2,046	2,101	$234,298	$240,988
Industrial technology services	19	20	57,545	91	98	131,198	185	183	230,530	232,524
Construction of research facilities	...	...	...	...	...	103,750	5	5	61,686	61,686
Gifts and bequests	...	...	17	...	...	17	...	...	17	...
Total, direct funding	1,646	1,718	236,195	1,787	1,898	436,747	2,236	2,289	526,531	535,198
Reimbursable Funding and WCF Investments										
Research, development and supporting services:										
Federal government	887	926	109,064	865	885	111,441	515	602	111,417	
Calibrations and tests, technical and advisory services:										
Federal government	28	29	2,783	27	28	2,856	28	29	2,708	
Public and non-federal government	250	261	25,383	243	253	26,045	232	243	24,700	
Subtotal, Services	278	290	28,166	270	281	28,901	260	272	27,408	
Standard reference materials (SRMs):										
SRM Sales:										
Government	5	5	388	5	5	449	5	5	562	
Public	104	108	8,273	104	108	9,568	93	97	11,987	
Subtotal, SRM sales	109	113	8,661	109	113	10,017	98	102	12,549	
Investment of WCF in production materials	...	...	541	...	...	...	...	...	...	
Subtotal, SRM	109	113	9,202	109	113	10,017	98	102	12,549	
WCF investments and operating adjustments	...	...	(1,689)	...	...	876	...	...	8,684	
Total, Reimbursable funding and WCF investments	1,274	1,329	144,743	1,244	1,279	151,235	873	976	160,058	
Total, NIST program	2,920	3,047	380,938	3,031	3,177	587,982	3,109	3,265	686,589	

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[1] Most NIST scientists and engineers are not engaged solely on one research project. An individual may divide his time between two or more projects financed by different sources of support. Also, salary costs of many staff members are charged to an overhead account and subsequently prorated to all directly funded projects. For these reasons, it is not possible to report employment directly for any source of financing. The Permanent Positions above are statistically-derived numbers, based on the estimated work years distribution for NIST programs.

NIST TOTAL REIMBURSABLE PROGRAM BY SOURCE OF SUPPORT
(Dollar amounts in thousands)

	1992 Actual	1993 Estimate	1994 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$13,566	$13,359	$12,720
Army	6,029	7,151	7,226
Navy	17,928	18,267	20,779
Other	25,966	26,376	27,499
Subtotal, Department of Defense	63,489	65,153	68,224
Department of Agriculture	139	115	118
Department of Commerce	6,750	5,551	4,650
Consumer Product Safety Commission	642	403	415
Department of Justice	2,014	1,972	2,031
Federal Emergency Management Agency	942	585	603
Department of Education	77	79	81
Department of Energy	10,860	12,946	11,255
Environmental Protection Agency	1,360	1,773	1,824
General Services Administration	1,692	1,960	2,004
Department of Health and Human Services	1,719	2,119	2,055
Department of Housing and Urban Development	366	286	295
Department of the Interior	1,254	1,294	1,332
National Science Foundation	1,262	986	986
National Aeronautics and Space Administration	5,493	5,304	5,244
Nuclear Regulatory Commission	1,058	1,103	1,137
Postal Service	253	261	269
Department of State	246	257	261
Department of Transportation	1,784	1,633	1,523
Department of the Treasury	1,698	1,700	1,751
Department of Veterans Affairs	546	562	579
Other	5,420	5,399	4,780
Total, Other Agency	109,064	111,441	111,417
Calibrations and Tests	7,702	7,926	8,167
Standard Reference Materials (SRM)	9,202	10,017	12,549
Technical and Advisory Services	20,464	20,975	19,241
WCF Investment	(1,689)	876	8,684
Total, Reimbursable Program	144,743	151,235	160,058

Exhibit 35

Department of Commerce
National Institute of Standards and Technology

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands)

	1991 Actual	1992 Actual	1993 Estimate	1994 Estimate
Periodicals	$12.4	$11.4	$12.1	$12.1
Pamphlets	23.6	49.1	46.8	46.8
Audiovisuals	14.0	0	3.0	0
Total	50.0	60.5	61.9	58.9

The National Institute of Standards and Technology produces only one periodical - The Journal of Research. *The Journal of Research of the National Institute of Standards and Technology*, issued six times a year, reports NIST research and development in those disciplines of the physical and engineering sciences in which NIST is active (physics, chemistry, engineering, mathematics, and computer sciences).

Exhibit 36

Department of Commerce
National Institute of Standards and Technology

Average Grade and Salary

	1992 Actual	1993 Estimate	1994 Estimate
Average ES salary	$101,759	$105,017	$105,017
Average GS grade	11.33	11.31	11.25
Average GS salary	49,879	51,244	50,650
Average salary of ungraded positions	29,514	30,607	30,607

Mr. **Price**. Testifying on behalf of these requests is Ray Kammer, Acting Director of the National Institute of Standards and Technology. We welcome you before the Committee, Mr. Kammer, and ask that you proceed with your statement.

Mr. **Kammer**. Thank you, sir. Thank you for having us here today. I apologize for Dr. Lyons, but it was unavoidable; it is a health problem and he sends his regards to the committee.

Mr. **Price**. Thank you.

Opening Statement

Mr. **Kammer**. Certainly it is a pleasure to be here today to present the President's budget for fiscal year 1994. For 1994, the Clinton administration is asking for $5.4 million for the Technology Administration, and $535.2 million for NIST. No funds are being requested for NTIS which, thanks to this subcommittee, now has sufficient working capital and can operate on a self-sustaining basis, which was envisioned in its organic legislation.

NIST has a vital part to play in the administration's effort to promote long-term economic growth, and among our increases there is $43.8 million increase proposed for the laboratory programs. We are also proposing for the Advanced Technology Program an increase of $132 million, and for the Manufacturing Extension Partnership, an increase of $12 million, and finally for our Quality Outreach Program, we are proposing an increase of $2 million.

We are also requesting $62 million for upgrading NIST facilities at Boulder and Gaithersburg. This represents a reduction from the prior year of $43 million. This was done to align requirements for construction and facility upgrade schedules.

If I may, I will summarize briefly the NIST laboratory programs and then the outreach programs, and then the other increases.

For NIST laboratory programs, we are requesting an increase of $4 million for electronics to provide for advanced measurement support for semiconductor manufacturing and high performance microwave integrated circuits. To promote U.S. industrial and international manufacturing competitiveness, we are requesting an increase of $4.2 million. For biotechnology and chemical processing, we are proposing an increase of $3 million, and we are proposing an increase of $6.6 million for advanced materials and processing.

We believe that the entire U.S. economy and our competitiveness will benefit from accelerating the development and deployment of technologies in high performance computing and communications. As part of the multi-agency administration program in that area, we are requesting an increase of $24 million. Lastly, as part of the NIST laboratory program, we are requesting a $2 million increase to enhance the access of business to international standards information.

For the Advanced Technology Program, again, an increase of $132 million to significantly expand the ATP program and increase our ability to share the cost of high-risk research programs, and also to work with joint ventures to develop new precompetitive generic technologies. We are requesting an increase of $12 million for the Manufacturing Extension Partnership (MEP). The MEP Manufacturing Extension Partnership, is comprised of the Manufacturing Technology Centers (MTC), the Manufacturing Outreach Centers and the State Technology Extension Program. They will work together with the States to assist small and medium-sized businesses in commercializing technology.

With respect to the Quality Outreach Program, we hope to capitalize on the achievements of the Malcolm Baldrige National Quality Award through government-industry partnerships. It is our plan to develop and share effective strategies with industry to improve U.S. competitiveness through improved quality.

If I may now, I will turn to NTIS. In an era when research labs are carefully examining their budgets to ensure that research responds to defined business needs, the demand for useful information about research will increase significantly. NTIS can play a pivotal role in meeting this need.

During 1992, NTIS management made a series of broad management changes designed to modernize its operations, to establish its long-term viability and to improve the quality of its products and services. These changes have significantly and measurably improved the management and organization of NTIS.

The changes also resulted in a special achievement award for quality and operation results from the Secretary of Commerce in 1992. We are very proud to report that NTIS's profits for fiscal year 1992 increased by 10 percent over fiscal year 1991. NTIS is now on a firm financial management basis, as it has not been in prior years.

I now turn to the Technology Administration proper, which is the Office of the Under Secretary for Technology, and then also the Assistant Secretary for Technology Policy, we are requesting appropriations of $5.4 million for 1994. This is an increase of about a million dollars over 1993. Half of this increase, or $500,000, will be devoted to the development of the Japan Manufacturing Technology Fellowship (MTF) Program that is aimed at providing U.S. manufacturing engineers the opportunity to obtain work experience in a Japanese manufacturing enterprise. This is a unique opportunity to learn about Japan's manufacturing techniques.

Finally, the request includes half-a-million dollars to create a high quality analytic staff to work with industry and the economic and industrial experts in ESA and ITA within Commerce to provide a basis for setting government policies that will encourage the commercialization of technology. I know of no other place in government that affords the opportunity to combine these economic and industry skills with technology skills to provide a basis for new policies.

In conclusion, the Clinton Administration's 1994 budget request provides the Technology Administration with the resources to help Secretary Brown transform the Department of Commerce into an effective force for technological competitiveness and manufacturing excellence.

Thank you, sir. I will be happy to answer any questions.

[The prepared statements of Mr. Kammer and Mr. Lyons follow:]

U.S. DEPARTMENT OF COMMERCE
STATEMENT OF RAY KAMMER, ACTING DIRECTOR
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY, AND RELATED AGENCIES

April 22, 1993

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to present the President's Fiscal Year 1994 budget request for the National Institute of Standards and Technology (NIST) and to discuss our programs and activities.

This year, the President is requesting three separate appropriations for NIST for a total of $535.2 million, which is an increase of $151.2 million over the FY 1993 appropriations of $384.0 million. We are requesting $241.0 million for laboratory research and services; $232.5 million for technology development and technology transfer and outreach; and $61.7 million for facilities construction and renovation.

Mr. Chairman, the President and this Administration have focused on providing long-term growth for the economy and job opportunities for the American people. A very important part of the Administration's efforts to promote long-term economic growth is to increase investment in new, productivity-enhancing technology. We must be able to use technology to revitalize our manufacturing sector, and we must create an environment in which industry can bring new technology to market and compete effectively.

NIST has a vital part to play in this effort because of its long-standing reputation in measurement expertise and its history of working with industry to develop the technologies needed in today's highly competitive marketplace. NIST is the only Federal lab with the principal mission of supporting U.S. industry's competitiveness objectives, and it has provided a steady stream of technology support to U.S. firms throughout its history.

NIST also promotes the development of new technologies through its Advanced Technology Program, which provides matching grants for industry-led research projects for the development and commercialization of precompetitive generic technologies.

To enhance the use of and access to technology, the Manufacturing Extension Partnership helps small and medium-sized firms adopt modern technologies. The President's goal is to establish "over 100 manufacturing technology and extension centers nationwide by 1997 to assist manufacturers in modernizing their production capabilities." Our Quality Outreach program fosters leadership in quality and competitiveness through government/industry partnerships.

One of the main underpinnings of the President's long-term investment economic plan is NIST's facilities infrastructure. NIST's laboratories were state-of-the-art facilities when first opened, but, over time, their ability to conduct research in today's highly technologically competitive world markets has eroded. NIST's request for 1994 includes funds to continue our program, started in 1993, to ensure that the facilities at our sites in Gaithersburg, Maryland, and Boulder, Colorado, are the modern, up-to-date laboratories necessary to maintain our nation's preeminent position in research and that U.S. industry has the support it needs from NIST.

I would now like to discuss our FY 1994 budget proposal. NIST Laboratory programs represent the technology "infrastructure" necessary to help U.S. manufacturers win on the economic playing field.

LABORATORY RESEARCH AND SERVICES

The generic technologies, measurement methods, standards, and processing improvements provided by NIST programs represent essential "roads and bridges" to world-class industrial competitiveness. Our budget proposal in FY 1994 is intended to broaden our expertise in electronics, advanced manufacturing, biotechnology, advanced materials, and high-performance computing, and increase our international trade and standards activities.

For our Laboratory Programs, we are requesting $43.8 million for program expansion.

ELECTRONICS

The electronics industry is the largest industrial employer in the U.S. The technological advances required for this industry to maintain or expand its market share both domestically and internationally depend upon increasingly complex, faster, smaller, and more densely-packed systems. NIST is requesting an increase of $4.0 million in FY 1994 to provide for advanced measurement support for semiconductor manufacturing, high performance microwave integrated circuits, magnetic storage, and new quantum standards, as well as basic research needed to develop such support. This investment is designed to help U.S. companies improve their competitiveness in the worldwide electronics manufacturing industry.

ADVANCED MANUFACTURING

U.S. manufacturing industries are faced with increasing competition from all quarters of the globe. In this country, 21 million jobs, over one-fifth of the Gross Domestic Product (GDP), and more than three trillion dollars in sales are undergoing a critical transition from traditional to 21st Century manufacturing techniques and technology. This initiative is designed to promote U.S. industrial and international competitiveness through accelerated investment in advanced manufacturing technologies.

The importance of advanced manufacturing technologies has been recognized by Office of Management and Budget (OMB) and Office of Science and Technology

Policy (OSTP) and is the subject of a new Federal Coordinating Council for Science, Engineering and Technology (FCCSET) presidential initiative on Advanced Manufacturing Technologies. NIST is among several Federal agencies which are participating in the effort. For FY 1994, NIST is requesting $4.2 million for this initiative, which is intended to develop cutting-edge laboratory capabilities in the standards, measurement, control and processing aspects of advanced manufacturing.

BIOTECHNOLOGY AND CHEMICAL PROCESSING

NIST is requesting $3.0 million to provide the U.S. biotechnology and chemical process industries with new measurement techniques and standards, predictive models and reference data, and engineering technology needed to improve processing efficiency, minimize or eliminate chemical waste, and accelerate commercialization of bio- and chemical products. Industry looks to NIST to provide underlying research and services that will complement industry's own efforts to improve competitiveness. Research funded with this initiative will help U.S. industry efforts to maintain a significant share of the world chemical and biochemical markets in such diverse sectors of the economy as agriculture, pharmaceuticals, specialty chemicals, and health products.

ADVANCED MATERIALS AND PROCESSING

While the U.S. continues to lead in basic research in the materials arena, significant gaps exist in the research and development required to move these materials from the laboratory to the marketplace. The once universal leadership role of the U.S. in segments of the materials field is being threatened or surpassed by foreign competitors. NIST is requesting $6.6 million to enable it to participate with industry in bridging the gap between bench scale conception and commercial utilization of advanced materials and advanced processing. The proposed NIST program builds on existing strengths in metals, ceramics, polymers, organic matrix composites, and cementitious materials and extends the areas of technical coverage to include synthesis and processing of advanced materials as well as materials process integration. The importance of materials technology has been recognized by OSTP and OMB, and through the FCCSET Committee on Industry and Technology has led to a new Advanced Materials and Processing program.

HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS (HPCC)/INFORMATION INFRASTRUCTURE

For FY 1994, NIST requests $24.0 million as part of the multi-agency HPCC program as described in the High Performance Computing Act of 1991 and the Information Infrastructure and Technology Act of 1992. NIST activities will expand and integrate programs in performance measurement, communications protocols, advanced software and advanced manufacturing applications in R&D, and development of the National Research and Education Network (NREN). NIST's work will be closely integrated with that of DoE, NSF, and NIH.

High-performance computing and networking are generic technologies which enable advances in the physical sciences and industrial applications. Significant advances in numerous scientific and engineering areas depend upon harnessing these new high performance technologies. In addition, efficient access to information is becoming critical for all parts of the American economy. Banks, insurance companies, manufacturing concerns, and many business operations depend on high-speed communication links.

INTERNATIONAL TRADE AND STANDARDS

The competitiveness of U.S. products in domestic and world markets is critically dependent on ready access to comprehensive standards-related information. NIST requests $2.0 million in FY 1994 to enhance the flow of vital standards-related information to manufacturers and exporters by assigning standards advisors to selected U.S. embassies and missions; expanding the capabilities of domestic legal metrology laboratories operated by state governments and the private sector; and harmonizing standards with trading partners and international organizations.

ADVANCED TECHNOLOGY PROGRAM

NIST is requesting an increase of $132 million to significantly expand its three-year-old Advanced Technology Program (ATP) to share the cost of high-risk research projects with U.S. companies and industry-led joint ventures seeking to develop new precompetitive generic technologies. Through a rigorous, competitive review process and by allowing industry to choose the topics it wishes to pursue, NIST has demonstrated that the ATP can leverage industrial research and development funding from companies and joint ventures of all sizes and in all industrial sectors. The total FY 1994 program request is $199.5 million. Aggressive growth is planned for the Advanced Technology Program. By 1997, the President's request for ATP rises to $744 million.

MANUFACTURING EXTENSION PARTNERSHIP

For FY 1994, NIST is requesting an increase of $12 million to begin implementation of the Manufacturing Extension Partnership (MEP) to assist manufacturers in modernizing their production capability. Coupled with the existing Manufacturing Technology Centers (MTCs) and State Technology Extension Program (STEP), the MEP will create a single, integrated program for continuous technological advancement. This increase will enable NIST to establish manufacturing outreach centers, smaller versions of the current MTCs, and will increase the number of MTCs. This proposal also increases availability of STEP planning grants to states to improve the local infrastructure needed for successful technology assistance efforts as well as grants to states to implement such plans. In addition, NIST will begin development of networking capabilities (LINKS) to link NIST-funded centers with other extension centers and technology sources throughout the country. The total FY 1994 program level will be $30.2 million. The budget will fund 2 additional Manufacturing Technology Centers (MTCs), 8 Manufacturing Outreach Centers (MOCs), and increase the availability of STEP support to a total of 25 states in 1994. The President's budget includes substantial growth for MEP rising to $92 million by 1997. By 1997, the MEP will support 19 MTCs, 48 MOCs, and 30 grants to states for planning and implementation of state based programs.

QUALITY OUTREACH

The Quality Outreach Program will capitalize on the achievements of the Malcolm Baldrige National Quality Award to provide national leadership in quality and competitiveness through government/industry partnerships designed to acquire new knowledge and develop new strategies. NIST is requesting an increase of $2.0 million to extend U.S. industry's status in quality and U.S. competitiveness by training "quality" leaders and assessors, providing feedback on quality improvement practices, applying quality principles to industrial research and development, enhancing ways to transfer information about quality concepts, and exploring the extension of the Quality Award concept to public benefit areas such as health and education. The total FY 1994 program is $2.8 million.

CONSTRUCTION OF RESEARCH FACILITIES

For facilities construction and renovation, we are requesting a total of $61.7 million in FY 1994, which reflects a one-year adjustment of $43.3 million from the FY 1993 appropriation of $105.0 million. This decrease represents a one-time reduction needed to align funding requirements with the facilities upgrade and expansion schedule. During FY 1994, we expect to complete the engineering design work started in FY 1993 and enter into negotiation with prospective contractors for the first phase of construction in Gaithersburg, Maryland, and Boulder, Colorado.

Mr. Chairman, this concludes my statement. I will be pleased to answer any questions that you may have.

STATEMENT OF JOHN W. LYONS
ACTING UNDER SECRETARY OF COMMERCE FOR TECHNOLOGY
BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND
RELATED AGENCIES
ON
THE PRESIDENT'S BUDGET REQUEST FOR FY 1994 FOR
THE TECHNOLOGY ADMINISTRATION
APRIL 22, 1993

Mr. Chairman, it is a great pleasure to be here today to present the President's budget request for the Technology Administration for fiscal year 1994.

For FY 1994, the Clinton Administration is requesting appropriations of $5,425,000 for the Technology Administration and $535,198,000 for the National Institute of Standards and Technology (NIST). No funds are requested for the National Technical Information Service (NTIS) which, thanks to this subcommittee, now has sufficient working capital and can operate on the self-sustaining basis envisioned in its organic legislation.

This budget request reflects a 39% increase for NIST and a 22% increase for the Technology Administration over FY 1993 appropriations. Implicit in this request is President Clinton's recognition that if technology is to fulfill its promise as a spur to economic growth and a generator of new jobs, then the nation will need improved strategies for government-industry cooperation in support of industrial technology.

One of the biggest changes is industry's increasing insistence that its research dollars be fully justified. For many years the larger corporate research labs hired large numbers of bright researchers and essentially allowed them free rein to pursue their scientific experiments in the expectation that any resulting technologies would be passed on to the manufacturing and marketing staffs to figure out how to convert them into salable products.

But in today's environment, firms cannot afford to operate this way, especially when the pace of technological innovation is such that technology becomes obsolete quickly and competitors can have similar products on the market in short order.

In today's rapidly changing, increasingly global technological environment the trend in the private sector today reflects (1) a focus on fewer projects, (2) increasing insistence that the company's research agenda reflect and further the company's business strategies, (3) greater integration of the research, manufacturing, and sales operations of a firm, with more ideas coming from the non-research side of a firm, and (4) increasing reliance on research partnerships to cushion the expense of basic or early stage research - or, to put it another way, an increasing reliance on other people's research.

This has important implications for federal policymakers. Certainly, support for basic science must remain a federal priority. But, at the same time, in a period of technological change and enormous deficits which we can ill-afford, the taxpayers no less than CEOs have the right to demand greater returns from their research investment.

As President Clinton rightly put it, a federal role that just supports basic research and mission-research and that relies on the "serendipitous" - to use the President's apt phrase - application of defense and other mission research to the private sector may have been appropriate for a previous generation, but not for today's profound challenges.

For this reason, the President, in his February 22 policy statement entitled "Technology for America's Economic Growth, a New Direction to Build Economic Strength," stressed that "(w)e must aim directly at these new challenges and focus our efforts on the new opportunities before us, recognizing that government can play a key role helping private firms develop and profit from innovations."

The budget request that you are considering today reflects these changing circumstances and the challenges as well as the opportunities that they present. Each part of the organization - NIST, NTIS, and the Offices of Under Secretary and Assistant Secretary for Technology Policy - has a major role to play in light of the changing conditions I described a moment ago.

I will start with NIST, whose budget was crafted to reflect three overarching principles.

The first principle that underlies the NIST budget for FY 1994 is a recognition that because resources are finite, there must be a healthy balance between the new Industrial Technology Services programs, such as ATP and manufacturing extension, and the need to ensure that NIST's longstanding laboratory research programs and its physical plant keep NIST at the cutting edge of technological development.

These longstanding programs provide NIST with the depth of knowledge and breadth of activities that have long made NIST an ideal collaborative partner for firms throughout the industrial spectrum that are looking to develop application-specific solutions to their particular problems. NIST must continue to remain in the vanguard of technological achievement.

Accordingly, we are seeking an increase of $43,800,000 for NIST's in-house laboratory R&D program. Of this latter amount, $24,000,000 will be used to enable NIST to participate in the multi-agency High Performance Computing and Communications Program and $6,600,000 will be used to assist industry in bridging the gap between bench scale conception and commercial utilization of advanced materials and advanced processing technologies.

At the same time, we are requesting $62,000,000 for upgrading NIST's facilities at Boulder and Gaithersburg. This reflects an adjustment of $43,000,0000 from FY 1993 appropriations and is necessary to align funding availability and requirements with the construction and facilities upgrade schedules.

The second principle is that in an era in which private firms are demanding greater return for their R&D investments and limiting their investments accordingly, government must ensure that the United States is sufficiently proficient in those advanced generic technologies that will create the new products and industries of tomorrow, that will provide large advances in productivity, or that will substantially improve quality.

Accordingly, the Administration is requesting an additional $132,000,000 for NIST's Advanced Technology Program which allows the Government and industry to share the high risk of promoting the further development of the technologies that will yield these great benefits.

NIST already has in place a review process that subjects a proposal to careful analysis from both a scientific as well as a business standpoint. The object is to screen out those that have little technical merit, those that are unlikely to ever make it out of the laboratory and into production, those that do not hold promise of broad benefits for companies in the United States, and those applicants that are not strong enough to carry the proposal to the next stage of product development.

Along with strict requirements that industry put up matching funds, that projects have a definite end, and by ensuring that projects are selected by industry rather than government, the ATP is demonstrating that it can become a vital force for helping U.S. industry create new or better products and do so before the competition. In today's rapidly changing interconnected world, the importance of getting to the market first is increasingly important.

This brings me to the third principle underlying the NIST budget: We cannot depend on innovation alone; advanced research and advanced manufacturing go hand-in-hand. In a world in which companies can locate their production facilities almost anywhere and technological breakthroughs can quickly spread to competitors around the world, a sound technology base for the rapid creation of new products and processes is not enough. As Laura Tyson and others have recognized, without a complementary manufacturing capability, innovating countries stand to lose a large share of commercial returns on their research efforts to other countries with superior manufacturing abilities.

Accordingly, the Administration is requesting an increase of $12,000,000 to begin implementation of a Manufacturing Extension Partnership Program. This will eventually evolve into a nationwide network of manufacturing extension centers called for by the President in his "Vision of Change for America" for assisting manufacturers in modernizing their production capabilities. By integrating the Manufacturing Technology Centers and the State Technology Extension Program and creating a national network, we hope to create a single, integrated program for continuous technological advancement.

At the same time, it has to be a program that recognizes that smaller firms differ widely in their needs and their capacities to absorb new technologies and they rarely have the ability to incorporate manufacturing technologies straight from the laboratory into their operations. Often what they need is management assistance, education and training programs for their workers, and access to financial planners and advisers if they are to understand and take advantage of new technological opportunities. We envision the program as one that will eventually link these firms with the various providers of services who can meet their different needs.

The $12,000,000 will enable us to run additional competitions for manufacturing technology centers, manufacturing outreach centers, expand the STEP program to several new states, and begin to develop networking services.

NIST's manufacturing extension plan, I should add, forms the basis of a substantial portion of a broader defense conversion program plan being managed by an interagency working group consisting of NIST, ARPA, NASA, DOE, and NSF.

Let me turn briefly to NTIS. Although we are seeking no funds for it, NTIS is an integral part of the Technology Administration. In an era in which corporate research labs are carefully examining their research budgets to ensure that the research responds to defined business needs, the demand for useful information about research going on elsewhere should significantly increase. To the extent that NTIS is prepared to move with the times and respond to these new developments, its importance to our national competitiveness goals will continuously grow.

During 1992, NTIS management made a series of broad, management changes designed to modernize its operations, to establish its long-term viability, and to improve the quality of its products and services. These changes significantly improved management of the organization and resulted in receipt by NTIS of a Special Achievement Award for Quality and Operational Results from the Secretary of Commerce in December, 1992.

We are proud to report that NTIS's profits for FY 1992 increased by about 10% over FY 1991 levels. We are also pleased that recently-enacted laws have helped position it for the future. These include a new revolving fund to provide a measure of financial stability and a requirement that agencies submit copies of their scientific and technical publications to NTIS, thereby ensuring it the up-to-date inventory to effectively service the needs of its customer base of approximately 70,000 universities, government agencies, and businesses.

Turning finally to the Technology Administration proper - that is, the Offices of Under Secretary and Assistant Secretary for Technology Policy - the Clinton Administration is requesting appropriations of $5,425,000 for FY 1994, or approximately $1,000,000 over FY 1993 levels.

Approximately $500,000, or half of this increase, will be used to further the Administration's commitment to manufacturing excellence and to complement the manufacturing technology activities of NIST and the related information dissemination activities of NTIS.

These funds will be devoted to the development of a Japan Manufacturing Technology Fellowship Program aimed at providing U.S. manufacturing engineers the opportunity to obtain work experience in a Japanese manufacturing enterprise where they will be able to obtain a unique opportunity to absorb Japanese manufacturing techniques and to obtain a basic understanding of Japanese business, culture and society.

We are very pleased that the Japanese Trade Minister cabled Secretary Brown on January 25 expressing his pleasure that plans for this program were proceeding apace in both countries, noting that - in his words - "with proper implementation, this program will be fruitful in bridging our two nations."

But that's just part of what we hope to accomplish to promote and which the requested funds will allow us to pursue. If I could sum up in one word what we hope to promote in FY 1994, it would be technology commercialization through "partnering" in its various forms. This includes:

- Promoting strategic partnerships, by which I mean encouraging the formation of consortia that can fully develop the many potential applications that a single technology can have but that are beyond the ability of any single firm to develop and exploit.

- Increased international cooperation in R&D in advanced manufacturing through activities such as the Intelligent Manufacturing Systems program.

- Increased collaboration between government, industry and academia aimed at unleashing the full potential of federal laboratories to contribute to national competitiveness goals, thereby building on the DOC-DOE-NASA-EPA-DOT -

sponsored National Technology Initiative.

- Increased collaboration between government, industry, and the financial and investment community to develop innovative technology financing and commercialization policies.

In conclusion, the Clinton Administration's FY 1994 budget request provides the Technology Administration with the resources for helping Secretary Brown transform the Department of Commerce into the effective force for technological competitiveness and manufacturing excellence that it should be. We hope you share that vision. Thank you.

DEFENSE CONVERSION

Mr. SMITH [presiding]. To start with—and I am not quite clear about this. I know that the new administration is going to put emphasis on technology and technology transfer, but we have a number of different departments and agencies that are involved in it one way or another. In one of them, there has been an attempt to get more involved with commercialization; I am not sure how well it has worked. In fact, I know very well it has been with DARPA. Just dropping the "defense" off of the name doesn't change it a whole lot. So now we have ARPA.

Now, under the new Administration's policy, and I realize you don't necessarily speak for the Administration on this, but you have some understanding of it, because you are involved in some of their discussions; how are you going to interface with ARPA? Who does what, and who is the lead, et cetera?

Mr. KAMMER. We recently signed a memorandum of understanding with the head of ARPA, and the other signatories, in addition to NIST, were the Department of Energy, NASA and NSF. Those five agencies are now co-managing, if you will, the half-a-billion dollar defense conversion exercise that I think is a matter of considerable interest nationally. Right now we have a draft advertisement out. Members of the NIST staff, ARPA staff and members of the staffs of the other agencies, but those two agencies primarily, have been traveling the country and organizing consultative events and workshops. We would like to generate a lot of applicants.

This is a complex advertisement, because it has some legal requirements in it that are not easy to follow. So we wanted the opportunity to explain it face-to-face.

On May 14th, the advertisement will become a formal advertisement, and normal procurement regulations will prevail, and we will no longer be able to advise people on how to apply for it any more. For 60 days the advertisement will be then available for people to make submissions against, and on July 23rd it will close. Members of the NIST staff and the ARPA staff and the other agencies will do a review process, a normal source selection board kind of a review, and make recommendations to a council which is comprised of the head of ARPA, the head of NIST, and appropriate people from the other three agencies.

Those individuals will consider the recommendations and attempt, in a consensus way, to come to a conclusion.

The final selecting official by necessity, must be the head of ARPA, because they have the fiduciary responsibility. Once those selections are made, and we believe it really will be a collegial effort, but once those selections are formally made by the head of ARPA, each of the agencies, particularly NIST, will be asked to take responsibility for elements of the program.

In our case, we expect to be asked to manage the technology deployment element of the package. The technology deployment element of the package is currently estimated to be between $100 million and $120 million. We will have the responsibility for actually letting the contract to the winning recipients and managing it.

Of course, we will have to report back to ARPA on some kind of a periodic basis, so that they can be assured we are managing it appropriately.

DEFENSE CONVERSION ASSISTANCE SELECTION

Mr. **Smith**. Regarding conversion, what is the criteria? Does it depend heavily on whether or not there is a defense plant closing in an area or a base closed down?

Mr. **Kammer**. No, sir, it does not. The rationale behind the package was that the economy as a whole is being impaired by the scale-down of the defense activities, which intensively spent money in manufacturing areas, as you know, and that therefore, the advertisement would not be restricted so an individual company had to be directly affected. The intent was more to try and aid the economy as a whole.

Mr. **Smith**. Well, I know you can't tell me completely, but what kind of grants are we talking about now? For what exact purposes?

Mr. **Kammer**. There are seven different categories, and, if I may, I will divide it into just three concepts; I think it makes it easier to follow. One concept is education, and there is about $85 million that has been set aside and will probably be managed by NSF for the most part.

Mr. **Smith**. Is that for training programs you are talking about?

Mr. **Kammer**. Yes, sir. It would be training programs of the sort that would help people to acquire new skills. It might be targeted to emerging industries, and also to help companies mount training programs that might allow them to adopt a new technology that would make them more competitive.

The other two remaining elements total approximately $400 million. The distinction of how much will be spent in each area is roughly half in technology development and half in technology deployment, although it will depend on the proposals. The proposal pressure might scale up in one and down in another. Technology development is akin to the more traditional ARPA activity of spending money to help industry develop a new technology, and technology deployment is very similar to the NIST activity in the Manufacturing Technology Centers and the other extension programs.

Mr. **Smith**. But will you still have a separate Manufacturing Technology Center Program?

Mr. **Kammer**. Yes, sir. One of the important distinctions is that the $500 million is a one-time event. The money must be obligated over the next two years; it can be spent out or outlayed over the next three years and then it is done. And, of course, our program is a continuing responsibility, and we hope to be able to be in a position to take responsibility for the winners, if you will, from the defense conversion process. Of the ones that have done well, and we expect a number of them to do well, we would like to then take responsibility for them in the regular NIST program.

Mr. **Smith**. I will have some more questions, but at this point I am going to yield to Mr. Rogers.

TECHNOLOGY TRANSFER OUTREACH COORDINATION

Mr. Rogers. Now, how will this administration coordinate NIST's, Advanced Technology Program, and NTIA's infrastructure initiatives? How will these programs work together? Are we duplicating ourselves?

Mr. Kammer. The program in NTIA that has some similarity to the ATP program would be the contemplated grants program that was in the recent supplemental and I believe was again proposed in the 1994 budget. The intent of that is to focus on nonprofit organizations, educational institutions, and to make sure that they have the ability at least to have initial access to the kinds of technologies that the information infrastructure initiative represents. This way people can learn how to access the resources that are becoming available electronically.

The ATP program is more broadly focused and is a competitive program that would support any technology which promises potential for commercial opportunity and to increase competitiveness in the United States. So NTIA is narrowly focused, from my point of view, at least technically, on initiatives that would aid nonprofits in entering the information age. The ATP program focuses on general manufacturing technology.

Mr. Rogers. The Commerce Department is creating a new office for policy and strategic planning. I would assume that much of what they will be doing relates to technology issues that come under the Technology Administration. Try to help us sort out the players from the Secretary on down by explaining how technology policy is being formulated, and who is coordinating such policies. I perceive there to be some duplication.

Mr. Kammer. I can describe what is; I am not sure I can describe what will be. We have a number of players yet to take their seats, as you know.

Within the first part of this administration, the Secretary of Commerce, Mr. Ron Brown, has been leading the policy development efforts, and this Office of Policy and Strategy is indeed intended to be a staff for him. It is not constrained to deal only with technology issues, but any issues that come within the governance of the Secretary of Commerce or indeed within his interest.

I have seen this particular office, which is led by Jonathan Sallett, ask us for support on technology issues. Indeed at the moment, one of the staff members from NIST is operating in that office to provide liaison and support, and there is the intention for another one to join them on a temporary basis to allow us to make sure that we go about this in an intelligent way without duplication and also making sure we are traveling in the same direction.

MANUFACTURING TECHNOLOGY FELLOWSHIPS

Mr. Rogers. Now, you request an increase of $500,000 to implement the U.S./Japan Manufacturing Technology Fellowship Program, placing American personnel in Japanese manufacturing firms. Tell us about that.

Mr. Kammer. Yes, sir. I think that is a real opportunity. Just this week, the Technology Administration sent out 1,000 applications. They already have lined up within Japan 66 firms that are willing to receive U.S. citizens. We are trying to focus on design engineering experts that can really exploit this opportunity. They will go over, work with Japanese manufacturing firms, learn how these firms operate and what they take into account in designing and manufacturing products, and bring that back and share it with the rest of their company.

Mr. ROGERS. Are these engineers?

Mr. KAMMER. Yes, sir.

Mr. ROGERS. All of them engineers?

Mr. KAMMER. That is our focus.

Mr. ROGERS. Is there a corresponding component that places Japanese personnel in our firms?

Mr. KAMMER. None that I am aware of.

Mr. ROGERS. How do you get select participants?

Mr. KAMMER. There will be a competitive process. We are soliciting interest right now.

In addition to that, the Society of Mechanical Engineers has very generously agreed to send a letter to all of their members, 700,000 of them, to bring this to their attention. I hope we are able to withstand the increased attention that we expect to generate.

Mr. ROGERS. Do the participating firms help pay for the costs?

Mr. KAMMER. Yes, sir. We make a base amount available, and then the U.S. firms have to pick up salary and benefits costs and other participation costs such as travel costs associated with this program.

Mr. ROGERS. Well, I thank you very much.

Mr. SMITH. How much is that base cost?

Mr. KAMMER. I don't know the answer, sir. I can certainly find that out.

Mr. SMITH. Would it be a minor part of the total cost?

Mr. KAMMER. Well, my personal experience in sending people to Japan is that it costs about a quarter-of-a-million dollars to keep them there for a year. Transportation and living expenses are very high.

Mr. SMITH. So most of it would not be government costs, or am I right about that?

Mr. KAMMER. I am reluctant to answer that, because I lack personal knowledge of it. I would rather find out, if I may. I may have assistance here.

Ms. STACK. We are currently negotiating with the Department of State and with other parts of the Department of Commerce to get funding for the initial program to set it up in 1993. The Department of State has committed $50,000 to devote to training courses. We have commitments of $100,000 each from MBDA in Commerce and from EDA in Commerce, and the Technology Administration will be contributing $225,000.

Mr. SMITH. What portion of the total cost do you think this government will pay?

Ms. STACK. Just the training costs. The salary and benefits costs for the engineers——

Mr. SMITH. That is my question. Are these other costs considerably more than what the total government——

Ms. STACK. Yes, the firms will pay salary and benefits costs, and the Japanese have agreed to pay housing costs for the engineers over in Japan. The Japanese government has verbally committed to providing $3 million to the program. The US government cost will only be for training and selection, or approximately $600,000.

Mr. KAMMER. My guess would be you could probably count on that being about—the salary and benefits for say a month for an engineer would be on the order of $15,000, including the benefits.

Mr. SMITH. I see.

Mr. KAMMER. Our training cost is probably $5,000, and based on my prior experience in Japan, the housing cost would be at least $2,000 a month.

MANUFACTURING TECHNOLOGY CENTERS

Mr. SMITH. Mr. Moran?

Mr. MORAN. Mr. Chairman, I am not ready to ask any questions.

Mr. SMITH. Mr. Price is coming right back in just a minute, and he heard the testimony.

Well then, you mentioned the Manufacturing Technology Center Program specifically a minute ago which is as an ongoing program. You have seven of those centers now?

Mr. KAMMER. Yes, sir, we do.

Mr. SMITH. And that will still be under NIST?

Mr. KAMMER. Yes, sir.

Mr. SMITH. And tell us how long the programs have operated.

Mr. KAMMER. Three of them are three years old. There are two of them that are two years old, and the remaining two are a year old, and they are in various stages of development. We will add an additional two out of this appropriation to bring that to a total of nine, and then just to relate back to your earlier question on defense conversion, our estimate is that it might be possible to receive qualifying bids from as many as five.

Mr. SMITH. Under that?

Mr. KAMMER. Under that. So we could end up with a program of as many as 14 by 1996, of which maybe five, plus two would be new.

Mr. SMITH. As many as seven new ones.

Mr. KAMMER. Yes, sir. Which will be quite exciting.

Mr. SMITH. Would they be exactly the same programs?

Mr. KAMMER. Each of those 14 would receive the same in the sense that each would be about $3 million of government money in its first year, about $3 million of local money, for a total of $6 million.

Mr. SMITH. The same criteria.

Mr. KAMMER. Exactly the same. Indeed, the defense conversion criteria, with some changes that are appropriate to being part of the Department of Defense advertisement, are exactly the same as the NIST criteria.

Mr. SMITH. I see. Then, under defense conversion, you have base closings and defense plants that are on State borders, and in fact are sometimes on both sides of the line. How do you put together the manufacturing technology center that affects two States or more?

Mr. KAMMER. At least conceptually, our criteria would even give you a bit of extra credit if you were able to do that.

Mr. SMITH. I see.

Mr. KAMMER. But in the first seven that has not been done, and I would say pragmatically it is rather difficult, because you then have to coordinate the activities of perhaps two state governments to put the match together, and that is not something they are very used to doing. The first seven are all exclusively contained within one State, and I expect that will probably be the case for the others.

Mr. SMITH. So in your invitation for applications that goes out in the middle of May-hcw do you cover this amount?

Mr. KAMMER. You mean the possibility of a split between two States?

Mr. SMITH. Yes.

Mr. KAMMER. It says in the advertisement that we encourage regional proposals, but that is about as far as we go.

Mr. SMITH. So you don't really tell them how they can bridge that.

Mr. KAMMER. No. And we really do not have any models so far.

Mr. SMITH. I can see how it would be difficult.

Mr. Price?

Mr. PRICE. Mr. Chairman, are we questioning now on just NIST, or on the Technology Administration also.

Mr. SMITH. Well, it is really kind of a combination. He is in both NIST and TA.

Mr. PRICE. We are going to combine both. All right.

Mr. SMITH. He didn't make the other statement, but he can answer questions from both.

ADVANCED TECHNOLOGY PROGRAM

Mr. PRICE. My questions are on all sides, but mainly on NIST programs.

In your testimony, in reference to the Advanced Technology Program, you say that you want to ensure that projects are selected by industry rather than government. I take it that is a statement that is well considered on your part. What do you mean exactly and how are you going to accomplish this?

Mr. KAMMER. Well, it is a pretty interesting process. We ran three competitions so far using this process. We have had about 660 proposals, and we have 60 selected recipients. What this means is we set criteria that have to do with the technical quality of the proposals, the business plan of the proposal, and what we believe to be, or what arguably the proposal believes to be the economic potential for the U.S. economy. We do not say the proposals have to be in the area of ceramics, or in the area of electronics, or a particular kind of electronics.

Instead, we are trying to rank the proposals based on their absolute technical quality, in our best judgment, and their business potential. Industry is leading us in the sense that they originate the proposals, they have made the judgment as to the economic opportunity, if you will, market opportunity.

Additionally, we feel and have felt pretty confident to make judgments on the technical quality using NIST staff members and staff members from other Federal agencies who are pretty generous with their time in helping us review these. We feel considerably less qualified to make judgments on the business plan.

What we have arranged is a cadre of business people, venture capitalists, and also experts from the academic community who come in when we are ready to do the business planning and sit with us and advise us on it. Indeed, we are guided to a significant degree by their judgment as to what the quality of the business plan is.

Mr. PRICE. The press release announcing the NIST budget refers to the Advanced Technology Program, and its development of potentially significant high-risk generic technologies. I wonder if you could interpret that use of the term "high risk" for us. Are you talking about the industry's attitude toward investments in this kind of project, or are you talking about the vulnerability of that industry to competitors, or perhaps are you talking about both?

Mr. KAMMER. We are conditioned more by the first case than the second, but I will give you an example. The concern here is to accelerate the commercialization of technologies that exist in the laboratory, and that most people would probably agree have commercial potential. There is sort a of historical record in the United States with the laboratory producing the technology being located in the United States, and the manufacturer and assembler being located offshore, not atypically in Japan.

One example is flat screen panel displays, which are TV screens that are maybe an inch deep, that you can imagine using on a portable computer. Maybe this hand-held communicator of the future is going to have a fax and voice communication as well as a computer relay in it all on a microwave chip. Those flat screen panel displays are economically a high potential market.

The technology is a very difficult technology. It needs to be lightweight, and yet the value system of the United States is high quality TV display. People have no patience with it being too small or blurry or too slow to respond. It is a very difficult technology.

So it is high-risk in the technology sense. It is also high-risk at this point, and the entire potential infrastructure in the United States amounts to about six firms, all of which at the moment are focused on a consortium that is jointly funded by ARPA and NIST. ARPA actually started working with them before we did, and now we have joined in also to try and push this along.

That contrasts, in this case, to a national commitment in Japan that amounts to some $250 million that the government set aside for this activity. So, the answer is high-risk in all respects, but still, we believe not risky in the sense of ill-conceived.

Mr. PRICE. Yes. The real potential for future payoff. I am especially interested in industries, a good example would be the pulp and paper industry in North Carolina and other States where we are clearly the leader in research and development, but want to maintain the research base that will permit us to stay in the lead.

Could you discuss the criteria that you have in mind for Advanced Technology Program projects, and will you be requesting any changes in those criteria in your authorizing legislation for example, that would enhance the efforts you expect through your sizable increase? We are, after all, looking at a sizable increase; around $132 million, I believe, for this program.

Mr. KAMMER. Yes, sir.

Mr. PRICE. It is clearly at the center of the administration's economic development efforts. Do you anticipate any significant program changes?

Mr. KAMMER. I will give you two concepts, and relate one of them back to the pulp and paper industry, which I think has an interesting opportunity and threat before it.

It is our intention, if indeed Congress sees fit to appropriate this increase, to set aside part of it to focus on Advanced Manufacturing Technology testbeds, and the concept here would be to suggest to industries that they organize themselves into a consortium and propose to us to create a testbed where they can work on innovative technology together. They can then take the results away and apply them to their individual cases. This concept was envisioned in what has been called for in S-4, which is probably familiar to you and has been incorporated in H.R. 820 in the House bill currently under consideration.

The second concept that we are considering at the moment is related to the pulp and paper industries, and related to all the chemical processing industries. As you probably know, these industries produce, of necessity at the moment, a large amount of environmental waste in the process of production, and one of the challenges we envision, both for societal reasons and also to be internationally competitive, is going to be to reduce the level of pollution created, while preserving the productivity and the competitiveness of the industry.

Indeed, we estimate in an industry such as the pulp and paper industry a decrease over the next 10 years of about 10 percent in effluent, accompanied by a decrease in operating costs that is going to be required to stay competitive, which is exactly the case you are talking about.

One of the issues that we have been discussing within the department is perhaps putting an environmental emphasis on one of the competitions where the focus would be environmental technology that would aid our industries in meeting what we perceive to be a future challenge, both from our society and also internationally.

Mr. PRICE. Well, as we expand this program and go more boldly into these areas, there clearly are some questions that we are going to have to answer about the criteria for assistance, and the criteria for success. How do we judge when we are succeeding?

Obviously, we don't want to just subsidize industry efforts that would be undertaken in any case. At the same time, we want to undertake projects that are sufficiently promising to ensure a fair and measurable return on our taxpayer investment.

Do you have any concluding thoughts on how we strike that balance, and in particular, how we make that judgment about whether industries are likely to undertake this in any case and where the Federal effort can truly make a difference?

Mr. KAMMER. Well, with respect to the baseline judgment, I feel in the long run, the next five to seven years, that creation of jobs, creation of expanded economic activity, and new businesses are the appropriate measures. That is a tough metric to draw a line back to, but we have specific cases. We have funded real individuals. If these particular firms grow and the projects that we funded seem to be part of a new product line, arguably there is a relationship.

With respect to the concept of when can you be sure that industry is not undertaking an activity versus, maybe they would have done it anyway and this is just sort of a pleasant subsidy for them. I would say then that is a prima facia case that the proposer here may be behind the power curve.

Mr. PRICE. Could you give us an example of an instance where you have had strong proposals, but where you have made that kind of judgment?

Mr. KAMMER. There have been a number of proposals, I need to be careful here not to disclose the specific proposals, but in the chemical processing industry where we came to know that other firms in that industry had developed the same idea and had succeeded. The proposal was a new idea for the proposing firm, but an old idea for some of the other firms in the industry, and we felt like it was a good idea.

On the other hand, you know, since people had already achieved this, we felt like it was not really our place to be the organization that supported this. They ought to be able to go to the bank and borrow the money and say look at this other firm, they are doing it and it, is working great.

Mr. PRICE. Mr. Chairman, I have a question or two about the manufacturing extension program, but I have taken a good deal of time. Perhaps I should wait for the second round.

Mr. SMITH. Okay. I told you we have opened up both NIST areas. Since you are testifying on both areas, we will go back to Mr. Rogers.

FY 1994 INVESTMENT PROPOSALS

Mr. ROGERS. Thank you, Mr. Chairman. Now, you are requesting $188 million as what you call investments for both NIST's in-house research, as well as a rather dramatic expansion of the ATP and MEP programs. But in order for us to fund those "investments", we would have to raise the spending caps that we are living under right now by law, and thus increasing the deficit, or we have to find offsets by cutting other programs.

How can we handle that problem?

Mr. KAMMER. Sir, we are way above my pay rate and level of expertise.

Mr. ROGERS. You requested $103 million in the stimulus package to expand the ATP program, and as you know, the stimulus package is not going to be passed in its current form. How much of the increase in your fiscal 1994 budget request was tied to continuing funding for grants made if the stimulus package had been passed?

Mr. KAMMER. If the stimulus package had been passed, we would have started four new competitions in 1993, and then, of course, we would have had the follow-on money requirement for the following year, since typically the projects are three to four years long that are supported.

With the apparent demise of the stimulus package, we find that we will be able to start four competitions in 1994, and that will be the first year for those. So the basic effect is that there is a about a six to eight-month slip in the initiation of the competitions.

Mr. ROGERS. Earlier this week the Inspector General spoke to us about the ATP program. He indicated the government is entering uncharted territory here, that we are essentially becoming venture capitalists. He indicated he has already identified problems within the existing ATP program with respect to accountability of the grant recipients who receive Federal funds.

He also raised the much larger question that instead of just pouring money into an existing program, are we developing clear program goals, and consequently performance standards so that we can judge the return on the investment as my colleague from North Carolina just mentioned. He indicated his willingness to work with NIST to develop those standards.

Now, tell us what specific concerns the IG conveyed to you about the existing ATP program and what steps you have taken to address those concerns?

Mr. KAMMER. The general tenor of his interest is much as you have described it. One of the things that we did initially with the ATP program and have continued is to involve the IG. We felt that we were starting something that was at least unlike our prior experience and unlike many people's prior experience, so we invited the IG in. Instead of the normal methodology where maybe three or four years after the initiation, there is an after-the-fact audit; we invited the IG in to be our house auditor, and indeed they are on all 60 projects.

In addition to that, we have an individual, a trained economist who also has taught in business planning at MIT in the past. We have engaged that individual as a permanent member of our staff. She is in charge of evaluation. She not only has an evaluation plan, but all the current projects have already been baselined, and we will continue to follow these projects through to what we regard as a satisfactory conclusion in terms of whether or not they were a success or failure.

Mr. ROGERS. So you have developed performance standards?

Mr. KAMMER. Yes, sir, specific to each project.

Mr. ROGERS. I am sorry.

Mr. KAMMER. Specific to each project, because they vary.

Mr. ROGERS. And you have refined your program goals and objectives?

Mr. KAMMER. Yes, sir.

Mr. ROGERS. Is that in a written form?

Mr. KAMMER. Yes, sir. The plan and the evaluation documents are, of course, available if you would like to see it.

Mr. ROGERS. I would, yes. If they are not too lengthy, could you file them as part of the record?

Mr. KAMMER. There is a summary that would fit admirably in the record and that I would recommend to you.

[The information follows:]

ATP Evaluation Plan

The ATP embraces strongly the idea that program evaluation is critical to the development of a results-oriented, efficiently run program. Early on, an evaluation plan was developed and measurable goals were identified against which to track performance. The evaluation plan contains the following four principal elements, each of which is briefly described below:

- Assessing Process Effectiveness and Efficiency
- Profiling Applicants, Recipients, Technologies, and Projects
- Tracking Short-to-Medium-Term Impacts
- Measuring Long-Term Economic and Other Impacts

Assessing Process Effectiveness and Efficiency

The first element in the evaluation plan monitors operational efficiency since it bears directly on the success of the program. Operationally, the ATP carries out the following principal activities in support of its mission:

- Soliciting proposals
- Evaluating proposals
- Awarding funds to companies
- Debriefing non-recipients
- Linking recipients to relevant research and facilities at NIST (where appropriate)
- Monitoring progress of funded projects and terminating them if warranted
- Coordinating ATP activities with other agencies

To evaluate its operational performance, the ATP collects data on each of the activities listed above. For example, it tallies the number of application kits distributed, number of proposals received, number of research entities represented in submitted proposals, number of cooperative research arrangements formed, industry matching funds committed, ATP funding requested, percentage of non-award applicants requesting and receiving debriefings, number of resubmitted proposals and the number of those receiving awards, number of technical and business reviews and reviewers, number of funded projects, etc. Ratios are used to adjust for changing budgets and numbers of proposals. These and related measures are calculated after each competition and by fiscal years. Longer-term performance measures of process efficiency will emphasize trends in ratio data.

Profiling Applicants, Recipients, Technologies, and Projects

The second element of the evaluation plan profiles applicants, recipients, technologies, and projects according to pertinent characteristics. The resulting information is needed to determine compliance with specific legislative directives and constraints; to answer the many queries received; and also to manage the program as the number and scope of projects funded increases. An extensive database on applicants, award recipients, projects, and technologies facilitates analyses.

Examples of the data collected are the distribution of applicants and awardees by size and type of organization and the type of application--single applicant or joint venture; distribution of funding by type of organization and technology; and distribution of applications, awards, and participating organizations by location.

Tracking Short-to-Medium-Term Impacts

The third element tracks the developments in the funded projects and notes particularly those developments that are expected to be good indicators of progress towards long-term success. The following "interim indicators" are examples of short-to-medium-term outcomes that are expected to herald progress towards long-run economic success:

- ☐ Increased R&D investment in generic technologies
- ☐ Increased collaborations/strategic alliances
- ☐ Strengthened technology infrastructure
- ☐ Promotion of small businesses
- ☐ Creation/retention of high-tech jobs
- ☐ Conversion of Defense companies to civilian applications
- ☐ Achievement of technical milestones
- ☐ Shortened R&D cycle
- ☐ Protection of intellectual property rights
- ☐ Investment in production capacity
- ☐ Licensing of technology
- ☐ Improved competitive standing
- ☐ Increased aggregate industry-level R&D investments traceable to demonstration effect of ATP

Quarterly and end-of-year company reports, data collection and analyses by ATP staff, and studies performed by participating companies and third-party contractor interviews, surveys, and case studies are all sources of information in support of this element of the evaluation plan. Currently, ATP has the assistance of several private-sector experts, including a university professor who is a leading "technology assessment" expert, and a contractor recognized for program evaluation and work on science and technology initiatives for economic development and industrial competitiveness. A database which is under development will facilitate future, more detailed statistical analysis of results.

Studies completed to date in support of this element of the evaluation plan include SOLOMON Associates, *An Assessment of Short-Term Impacts: First Competition Participants*, February 1993; and Dr. Albert N. Link, *Economic Study of the Printed Wiring Board Joint Venture After Two Years*, April 1993.

Measuring Long-Term Economic Impacts

The fourth element of the evaluation plan measures long-term economic impacts of projects funded. The economic impact measures relate directly back to the ATP mission statement and are designed to assess the long-run success of the ATP in contributing to U.S. economic growth, industrial competitiveness, and job creation. Measures of long-run success of the program will focus on the degree to which desirable impacts have been brought about in the following:

- Company sales and value added
- Manufacturing costs/product quality/time to market
- Market share
- New industry creation
- Pollution reduction or prevention
- Health and safety effects
- Multiple-use technology creation
- Technology infrastructure
- Employment
- International trade balance
- Return of investment -- private and public investment

The ATP is expected to stimulate new and improved products and processes with high-value added; decrease manufacturing costs, increase yields, decrease time to market and increase manufacturing productivity; spawn entirely new industries, as well as help existing industries grow; and improve the global market share and competitiveness of U.S. companies. The ATP is also expected to stimulate and speed the development of new medical diagnostic treatment tools, safer products and processes, and environmentally benign products and processes. The technologies developed are expected to affect multiple industries. The long-run impact measures are geared to determine the success of the ATP in meeting these expectations.

Measurement of sales, for example, indicates the degree of commercialization. Measurement of value added and growth of new industries established from commercialized products, processes, or services are first-order approximations of the contribution of the ATP to economic growth via contribution to Gross National Product. Growth in international market share of relevant U.S. industries is a first-order approximation of the contribution of the ATP to the competitive position of U.S. businesses in international markets. As the ATP contributes to higher international market shares of industries, the competitive position of these industries improves and their ability to further increase sales and grow faster also improves. Pollution reduction and prevention, and health and safety benefits are listed separately because they tend to be more controversial to measure in dollar terms than many other effects.

The measurement of economic impacts of the ATP requires three major efforts: (1) the development of quantitative measures of the degree of influence or effect that the ATP has on the introduction and diffusion of each new technology it funds; (2) the development of quantitative and qualitative measures of the influence or effect of each ATP-funded technology on the economy--including the private and social impacts; and (3) the estimation of private and social costs of developing each new technology. *Private impact* denotes the net effect of a new technology development on the profit streams of private industry; *social impact* denotes the total net effect of a new technology development on the nation at large, covering a variety of influences or effects. *Private rates of return on investment* are computed by relating the stream of time-adjusted private benefits to time-adjusted private costs in appropriate formulae. *Social rates of return on investment* are computed by relating the stream of time-adjusted quantifiable social benefits to time-adjusted quantifiable social costs. *Public rates of return on investment* are computed by relating that part of total quantifiable social benefits that are attributable to Federal expenditure to the time-adjusted Federal expenditure. Rate-of-return measures are particularly useful for comparing the efficiency of using capital in one endeavor as compared with alternative endeavors.

With respect to measurement methodology and impact evaluation techniques, the ATP planned approach focuses on estimating specific benefits and costs of developing new technologies, estimated through a microeconomic case-study approach. A macroeconomic modelling approach is not considered a feasible approach, given the magnitude of the funding amounts relative to aggregate measures of the economy and the intricacies of cause and effect. The case studies will be in the tradition of an established body of microeconomic case studies of net benefits and social rates of return from technology investments. Statistical sampling techniques will be employed to select projects for detailed analysis.

It is premature to assess long-run economic impacts because projects funded by ATP are multi-year and all are still in the R&D phase of the product/process development cycle, In most cases, it will be a minimum of several years after the ATP-funded work is completed before the technologies will be incorporated into products for sale, although there is some early evidence of newly developed technologies already moving into commercial products.

Mr. ROGERS. And you are going to continue to work with the IG?

Mr. KAMMER. Yes, sir.

MANUFACTURING EXTENSION PARTNERSHIP

Mr. ROGERS. Now, as I understand, you are proposing to expand some existing programs, the Manufacturing Technology Centers and the State Technology Extension Program, as well as add new Manufacturing Outreach Centers; is that correct?

Mr. KAMMER. Yes, sir.

Mr. ROGERS. How will these programs interact with each other?

Mr. KAMMER. Well, the ultimate concept that we have in mind is a goal that the President set for us, which is to create 100 manufacturing centers across the United States in the next four years. We see this as a mix of Manufacturing Technology Centers, which are roughly $3 million of Federal money and $3 million matched of local money, so a $6 million total effort, combined with manufacturing outreach centers.

The Manufacturing Outreach Centers are junior MTCs, if you will. They are responsible for roughly 2,000 firms in an area of responsibility as opposed to an MTC which might be responsible for 5,000 to 6,000 firms. They are not necessarily going to have all of the same skills on the site that an MTC would, but they will have electronic communication ability back to the MTC and also to NIST, so that they can draw on that expertise, and indeed, we hope to involve also DOE laboratories and NASA laboratories in this information infrastructure.

Additionally, if you were to do a map of the United States and try and plot the areas where there are 5,000 to 6,000 manufacturing firms in a dense area, you would discover that there are about 30 such areas, at least that is our current level of understanding. There are a lot of areas that have a less dense distribution of manufacturing firms, and yet could profit from this assistance. In the rural areas, particularly, we imagine these MOCs could make a contribution also.

In the final pattern, we would hope to have perhaps two-thirds MOC, maybe a third MTC.

Mr. ROGERS. And what will they do?

Mr. KAMMER. They work with small and medium-sized firms to assist them to incorporate useful manufacturing technology in their ongoing lines of business. This is not an attempt to encourage these firms to develop new technology by themselves, but rather to adopt the best available practice to their specific manufacturing firms. The analogy of the agricultural extension agent to the farmer is not perfect, but it is at least provocative of the idea that we are trying to strike.

We have had some initial success. The evaluations that we have done in New York and Ohio, for firms that we have worked with for at least two years, show a 15 percent increase in jobs, seven percent increase in productivity and a 34 percent increase in sales.

I would not want to draw strong conclusions from that, because it is a pretty small sample, but it is exciting. At least it is not a negative inference.

Mr. ROGERS. Well, I will bet you that the sales manager for one of those firms is claiming credit for that increase.

Mr. KAMMER. And he should, I wish he would, as long as the increase takes place, I am pleased. We have a statutory Visiting Committee that comes in and evaluates NIST on a four-times-a-year basis. It is made up of people mostly from industry, and a few people from the academic community, nobody from government, by law, and as you can imagine, they are pretty pragmatic people, and they have told us that they wanted to see this for themselves, and the best thing that we could think of to do was bring in the leaders of some of these small firms that we have worked with, and we just let the Visiting Committee talk to them. They seemed very committed to saying that this MTC concept had been of assistance to them. I can not really see what would have motivated them other than sincerity.

Mr. ROGERS. How do you pick which factories or companies to take on?

Mr. KAMMER. The ones that are willing to listen to us. In an area such as Cleveland, which is one of the ones that I think I personally know best, since I have studied it the most, there are upwards of 7,000 firms. This is a characteristic, rust belt kind of an area, and there are a lot of small and medium-sized firms that have been going on in the same fashion for a long period of time, living on a smaller set of rations each year because they have not been making changes. It is amazing, but changes such as using computerized inventory systems to reduce the amount of time that you have inventory sitting idle make big differences.

Some people are willing to change and they get quite excited, they become self-motivated; some are not. At the moment, the people at the MTC are trying to work with the people that get excited.

Mr. ROGERS. How could you conceivably offer anywhere near the majority of those companies assistance?

Mr. KAMMER. We are finding in the case of Cleveland, in the case of Albany, and in the case of South Carolina, that they can add about 200 new firms to their relationship a year, and that is about the rate that they can proceed at and be useful.

Mr. ROGERS. I would assume, for example, in the Cleveland area that there are a number of those companies in competition with one another.

Mr. KAMMER. Yes, sir.

Mr. ROGERS. Quite a few, I would suspect. You help one of those competitors to the disadvantage of the others.

Mr. KAMMER. I hope it motivates the other competitors to come and demand assistance.

Mr. ROGERS. I mean is that fair? For these other people's taxes to be used to aid their competitor to out-compete them?

Mr. KAMMER. Well, in some respects, any competition ultimately rests on the resources of the individual competing, and there is, therefore, sort of an inherent unfairness in that people start with different levels of intelligence, different levels of energy. I respectfully direct your attention also to the thought that while we are considering how we compete among ourselves, we must also consider how we compete with our foreign country competitors. There are

170 entities in Japan very similar to the MTCs. Indeed, the concept that we are pursuing is derived from studying them.

Mr. ROGERS. Well, is there some notice put out to 7,000 units in Cleveland that this is available to each one of them?

Mr. KAMMER. The most successful techniques that we have had for contacting people have been to work with entities such as the chamber of commerce, to work with the rotary clubs, to also spend time working with service vendors that work with small and medium-sized businesses making ourselves known to them and then they help us make ourselves known to others.

I wish I could tell you that all 7,000 firms perhaps, whatever the right number is, in Cleveland had knowledge of the MTC and had decided, yes, I want it or, no, I do not. I am afraid I can not tell you that, but we are doing our best, and it is improving.

Mr. ROGERS. I appreciate that the Agricultural Extension Service analogy that you have given us is, I am sure, fairly true.

However, I don't know how we avoid the government picking a winner and a loser, and I don't want us in that game. I believe I am enough of a believer in the free enterprise system that the cream will rise to the top, and the best competitive product will be made out there if we leave them alone. But if we go in and pick John Jones over Bill Smith and say we are going to help you, we are going to give you some secrets that we have learned across the country over here that will help you beat out Bill Smith, I don't think that is the government's role.

Now, can you help me with that?

Mr. KAMMER. Well, if, indeed, we were concealing our presence from Bill Smith while we helped Bob Jones, I think you could create that defect, and it is, I think, an unfair one, considering we are using tax money. As long as we do our level best to make ourselves equally available to all, if Smith says yes and Jones says maybe tomorrow, I really feel that is his decision rather than the government's decision. It is not a bad balance, in my personal point of view, between that and the need to remain competitive with our foreign competitors who are selling in the United States at the same time we are.

DEFENSE CONVERSION

Mr. ROGERS. Well, many of our foreign competitors, are subsidized—the national government subsidizes most of their operations. That allows them to take advantage of our refusal to do that. So our system is not comparable to our competitors, and yet we have not done too bad over the years in competition.

So I think we need to proceed carefully. Is the national government, in its infinite wisdom, picking winners and losers, not just sectors of industries, but particular plans, which is even worse? I believe that when the national government begins to interfere and nationally plan what industries do, we are going against what the Russians have learned is not a very wise thing to do.

That is the reason why they are privatizing in Russia. It seems we are moving in the other direction.

Now, will you be receiving funding from DOD for some of these activities?

Mr. KAMMER. Yes, sir.

Mr. ROGERS. Can you give us a breakdown of the amount of funding DOD is contributing to this initiative and the amount NIST is contributing for 1994?

Mr. KAMMER. The total defense conversion, is just under $500 million—as I recall, $490 million. Of that, our expectation is that ARPA will ask NIST to manage somewhere between $100 million and $120 million, all through technology deployment activities, which is very comparable to the MTCs and the MOCs, the Management Outreach Centers.

Our total proposal for those in 1994 is an increase of $12 million, which would carry us to a total of $30 million.

Mr. ROGERS. That is for 1994?

Mr. KAMMER. Yes, sir.

Mr. ROGERS. What about future years?

Mr. KAMMER. My understanding is that the defense conversion money is a one-time event, and that the money is available for spend-out over three years. If it were $100 million, that would be roughly $30 to $35 million a year for the three years, against us spending about $30 million, at least, in 1994.

Mr. ROGERS. After which, the Subcommittee will have to find the money from our own allocation, if at all?

Mr. KAMMER. If at all.

Mr. ROGERS. In other words, we would have to pick up that funding level after three years?

Mr. KAMMER. After three years. It would be my hope that we would be able to persuade a lot of people. We have to persuade our bosses in the administration, as well as our bosses here, to allow us to take responsibility for the successful programs that have been started by this process.

Mr. ROGERS. Well, it seems to me that this is an awfully big bite to take at one time. This is an immense increase over a one-year period. I am not sure that we can get all that done in the timeframe you outlined. I would like to see us go a little slower and feel our way along to be sure that we are doing the right thing because, number one, it is a lot of money, and number two, I am not sure we can spend it that quickly without wasting a lot of it.

So I would hope that we would be a little more cautious as we move along here.

Mr. KAMMER. If I could volunteer a fact that may be somewhat reassuring, the ATP program, which of course is the majority, $132 million of the money, has so far been able to fund approximately one in ten of the applicants that come before it. Of the 660 proposals that we have had that met the minimum qualifications, we have been able to fund 60. That is very conservative by any other kind of proposal process that I am familiar with in NSF or in ARPA, and it seems very likely that we would be able to operate on exactly the same level of proposal rate and probably fund quite a few more proposals that come in.

Mr. ROGERS. Thank you.

Mr. SMITH. Mr. Mollohan?

Mr. MOLLOHAN. Thank you, Mr. Chairman.

MANUFACTURING EXTENSION PARTNERSHIP

Mr. Kammer, welcome. The Manufacturing Technology Centers which you were discussing with Mr. Rogers, they are in the nature, would I be fairly accurately describing them—as describing them in the nature of a technical extension service, perhaps analogous to the agriculture extension service, I think most of us are pretty familiar with?

Mr. Kammer. Yes, sir. I am personally pretty comfortable with that analogy. I think it pulls most of the right ideas out.

Mr. Smith. Really, if you will let me interject here, they have two programs, though. One is the Manufacturing Technology Centers and the other one is this program that you call—what do you call it?

Mr. Rogers. Outreach.

Mr. Kammer. The Manufacturing Outreach Centers.

Mr. Smith. It only has a million and a half?

Mr. Kammer. Yes, sir.

Mr. Smith. It is the one that the Science and Technology Committee has pushed, which really, in my judgment, does about 20 percent of what SBDC's do. In other words, it is excess baggage. The Manufacturing Technology Centers are the ones that are really doing the job of technology transfer.

I know you don't want to comment on what I said there.

Mr. Mollohan. I was asking about those, Mr. Chairman.

Mr. Smith. So when you say "extension," some people might get that mixed up with this million and a half dollar program?

Mr. Mollohan. I was asking about the Manufacturing Technology Centers.

Mr. Kammer. There are several of them; there are no Manufacturing Outreach Centers yet. So I would be presumptuous to characterize their performance when we have not performed yet.

Mr. Smith. We have about 520 of those SBDCs.

Mr. Mollohan. Which is certainly an outreach effort.

Mr. Smith. Yes.

Mr. Mollohan. Are all industries, businesses, and manufacturing shops in a reasonable geographical area invited to avail themselves of the services that are offered by the Manufacturing Technology Centers?

Mr. Kammer. Yes, sir. We are finding that the Manufacturing Technology Centers which are managed locally tend to all provide similar basic services that have to do with assistance in automation, which is a common need, assistance in inventory control, and assistance in controlling work-in-progress kinds of activities.

In addition to that, we are finding that each of the centers is sort of focusing on a specialty that is characteristic of the area. For instance, the one in California is focusing on electronics; the one in Cleveland on metal removal, using lathes and the like, which seems perfectly sensible to me.

Mr. Mollohan. Really, the focus of my question was access.

Mr. Kammer. The MTC's are open to all.

Mr. Mollohan. Open to all? And it is limited only by the inclination of the businesses in the area to avail themselves of the service; isn't that correct?

Mr. KAMMER. That is exactly the intent.

Mr. MOLLOHAN. Would it be accurate to say that there is no selection process involved on the part of the MTC? I mean, you don't go out and pick winners and pick losers.

Mr. KAMMER. We are attempting to interest all in the area, rather than decide if we will select a particular company.

Mr. MOLLOHAN. I think it is important in this whole discussion to understand the role of each of the various agencies that are collectively coming to implement the competitiveness policy as I understand it, the function of MTCs is for this outreach activity, inviting anybody in their convenient geographical area to avail themselves of the particular service of an MTC——

Mr. KAMMER. Yes, sir.

Mr. MOLLOHAN [continuing]. And to provide a reference service for technology transfer that would be most applicable to the needs of that particular company if that particular MTC's focus did not answer the particular problems, isn't that correct?

Mr. KAMMER. That is exactly correct. They have access back to NIST, I believe there is no area of manufacturing technology for which we are not capable of finding the answer, if we do not have it ourselves.

TECHNOLOGY ADMINISTRATION

Mr. MOLLOHAN. In fact, you are becoming quite a network, aren't you, as you cooperate with ARPA and you cooperate with the other agencies involved?

Which leads me to my next question. What role is the Technology Administration playing in Commerce to facilitate this cooperation between ARPA's, the Office of Science, Technology and Policy's, and the National Economic Council's? Are you far enough along in this process that you can give us an idea of how you are going to integrate this agenda so the Federal government doesn't end up with overlapping funds and duplicative responsibilities?

Mr. KAMMER. I think I see how it is going to work at the operating level—and I will give you an example; NIST will work directly with other laboratories, and we recently signed a memorandum of understanding with Sandia, which is a wonderful national laboratory, to collaborate on a road map that was developed by the semiconductor industry association. They have identified their needs over the next 15 years for technical support, and between Sandia and NIST, we have agreed to undertake to provide support in the areas that are generic in nature and where we think we can be of assistance.

That is the kind of thing that requires immediate technology. It requires the ability to make a commitment to them, to order people into the lab; it is appropriately done at the NIST level.

At the next level up, we need to work out relationships for such things as the government-wide policy on intellectual property, which is an assignment that has been given to TA by law. That of course determines how an awful lot of people act, and how you make your money besides how you are going to act a lot of times.

And in addition to that, TA will have the responsibility for working with entities such as the National Economic Council, which is just inventing itself at the moment, and also the processes that OSTP oversees, which are called FCCSET studies. Our role in that is to provide technical support and advice; but indeed they would be the senior representative and spend the enormous amount of time it takes to get one of those reports out.

TECHNOLOGY TRANSFER

Mr. MOLLOHAN. In terms of transferring research and development to the application on the shop floor in a period of time that really does create competitiveness with our foreign or other competition, how do you see the roles?

I look at the traditional DARPA role and apply that to the ARPA role; and I foresee that perhaps winners and losers might be chosen. I wouldn't choose to say it that way, but since we have already used those words, I believe that critical technologies would be identified by ARPA. Then I would foresee research and development and perhaps some insertion effort with specific companies in order to prove that technology. It is my impression that, the function of NIST would be more to facilitate technology transfer at a different level, at the marketplace level. Is that being envisioned?

Mr. KAMMER. I think that is a good model. The reason why ARPA is in a position where it is often selecting a particular technology is, of course, it knows its customer, which is the rest of the Department of Defense; and it knows that there is a specific need, and their primary objective is to serve that need, the need of the uniformed services. That has had the wonderful effect, in a number of cases, of creating other technologies.

I would say the Department of Defense and DOE national labs created the supercomputing industry out of their needs. Now the same supercomputers are being used by civilian agencies, used for design of very dynamic features for automobiles. It is indeed, as I understand it-when we meet supercomputer vendors, a U.S. one has sold 40 computers for civil applications in the last four years.

There is an example where I am not sure there ever was or would have been a potential for a NIST role. That one arose completely from a number of other technologies including materials technology, where DARPA and others are paying for fighter airplane structures made out of a composite. It is acceptable to the Department of Defense to have the cost of that be high, because they need the performance very badly. In a civil environment, that is unacceptable.

I mean, this role might then focus on research that would reduce the cost, make the manufacturing costs more efficient. I like that model, yes.

Mr. MOLLOHAN. And then you would see that transferring role being played out by you and the folks that you work with?

Mr. KAMMER. Yes, sir.

MANUFACTURING TECHNOLOGY CENTERS

Mr. MOLLOHAN. With regard to the Manufacturing Technology Centers, the President talked about there being 100 of these, and yet you have a very small amount of money. Requested this year for this purpose—$12 million, I believe.

Mr. KAMMER. Yes, sir.

Mr. MOLLOHAN. How far down the road do you expect to get with $12 million?

Mr. KAMMER. If the defense conversion process plays out as I believe it will, the five or so that we selected from there, plus the two——

Mr. MOLLOHAN. From the 12?

Mr. KAMMER. No, no. Sorry. We have seven already under way. With our $12 million requested increase, we can start two Manufacturing Technology Centers; and to start up eight Manufacturing Outreach Centers and focus on some State Technology Extension Program grants as well, and then use the defense conversion money to start perhaps another five MTCs. So it would be five plus two would be seven. Those seven plus the seven we already have would carry us to 14.

Mr. MOLLOHAN. Are you talking about in fiscal year 1994?

Mr. KAMMER. In 1994 and 1995.

Mr. MOLLOHAN. And the conversion money you are talking about is 1994 money?

Mr. KAMMER. It starts in 1993, and that money then, which is one-time money, has to be spent out over three years; so we might spend a third each year over the next three years—1993, 1994, and 1995. It probably falls a little bit in 1996, because of the time of year we are in.

But if we could double the MTCs in the next 12 months, which I believe is possible from the combination of these two, that would not only be, I think, an important accomplishment, but I will tell you that we have probably exhausted, for this year at least, the supply of adequate proposals. I do not believe there are 10 proposals out there that are comparable to the seven that are already funded. I would be delighted to be proven wrong, but I do not believe there are.

Mr. MOLLOHAN. There is a recurring obligation in the outyears to support these?

Mr. KAMMER. Yes, sir.

Mr. MOLLOHAN. Could you give the committee an idea of what the obligation will be into the outyears to support these centers?

Mr. KAMMER. The rate of commitment, let's see, for the ARPA activities, for the MTC part of the activities.

Mr. MOLLOHAN. For the MTCs created with the ARPA money, which will be your responsibility, will you have to pick up additional obligations?

Mr. KAMMER. Right, it will be about $15 million a year for outyear increases. It is roughly $3 million for each center; that is how I am doing this in my head.

Mr. MOLLOHAN. We are up to how many MTCs?

Mr. KAMMER. Fourteen, so it is basically 14 times 3, which is, will fit into the $37 million adjusting for the phase-down in funding for the older centers.

Mr. MOLLOHAN. You anticipate the cost of supporting each MTC to be approximately $3 million a year?

Mr. KAMMER. Yes, sir, for the government. There is also H.R. 820, which is currently under consideration, which changes some of the rules. The current pattern is that, the government supports the 50 percent rate for three years; and then in the fourth year, a 40 percent rate; and the fifth year, 30 percent; and 20 percent in the sixth and final year.

The legislation, H.R. 820, is considering amendments and discussion that would suggest that the government rate of support would stabilize at a third and would continue past the sixth year. And I do not know how that is going to come out, so the rules could change in the middle of the game.

Mr. MOLLOHAN. Okay. Thank you.

Mr. Moran?

Mr. MORAN. Thank you, Mr. Mollohan.

The situation that I face in my district is similar to what Mr. Price faces with Triangle Park and others. It seems as though the MTCs have had a particular reliance upon capital intensive conversion and applications. In Northern Virginia, we have a major role in defense contracting, but it is not a capital intensive one, it is really a human resource technology or information orientation.

Now, are these industries going to play a role in your expansion of the MTCs?

Mr. KAMMER. We are proposal driven. We so far have not seen a proposal that was focused on sort of the intellectual service industry, if you will.

Mr. MORAN. The software, the intelligence?

Mr. KAMMER. Yes. It is such a large component of the future economy that it would be wonderful to see such a proposal, but thus far, the proposals have tended to be viewed as proposals that focused, as you say, on capital intensive industries, on areas where it is a very large effort to make change.

But that would be an interesting topic to address.

Mr. MORAN. Thank you. Some of the firms that have been funded, by DARPA particularly, in the past have expressed some concern that there might not be as much pressure for outreach to minorities and women enterprises; and I think it might be useful to get your commitment on the record in that regard.

I am sure you are going to assure them that there will be at least as much commitment as in the past. Actually, I haven't been all that impressed by DARPA's outreach in that area as it is.

Mr. KAMMER. The current administration has a commitment to diversity that I know is well-known to you, sir.

Mr. MORAN. I think that is true. Any of us who have tried to recommend a white male to any job in the administration have come to realize very quickly the commitment to diversity.

Mr. KAMMER. Ron Brown has very effectively and intensely conveyed his commitment to this, too, and we will do as our bosses wish us to do.

Mr. MORAN. Okay. Good. Well, fine. I won't take up much more of your time. I thank you for the previous questions that you answered, I am pleased that you have taken this on; and at some point I will get into a colloquy with Mr. Rogers on what role the government might play, because I do think we have missed the boat in certain industries. Maybe that will be taken care of in terms of developing a fairer trade policy.

But with Japan, for example, they deliberately go about training their students as well as their adults. They develop an industry because they know that it is going to have a particularly high profit margin, and they will go ahead and subsidize to the point of enabling them to afford to dump that particular product in the United States, create the market, drive our competitors out; and then, of course-over time they far more than make up for the initial public investment. While "industrial policy" may not be the right word, I do think we have to be aware of that and perhaps less purist than we like to be.

Mr. ROGERS. If you will yield, I don't think you want to duplicate that though, do you, here in this country?

Mr. MORAN. No, but we don't want to be patsies to that kind of strategy either. It probably takes some governmental direction, also a very fair trade policy in addition to a free one. And we may have to take a more hard-ball stance than we have in the past.

Mr. ROGERS. If you will continue to yield. While I agree with you on a proper government role, I think, to protect our borders from dumping and illegally subsidized trade practices, our policy should not be, in my opinion, to encourage our own industries to do the same type of thing.

Mr. MORAN. I understand that. But you look at the number of technological products that actually originated here. There were American inventions but another country seized upon them; and made the high profit margins from that invention. And I think that is one of the things that NIST is at least conceptually designed to overcome, to enable us to fully exploit the capability, the innovation and the inventive capacity of our own people. I just thought I might throw that into the record.

Thank you, Mr. Chairman.

Mr. SMITH. Mr. Skaggs?

Mr. SKAGGS. Thank you, Mr. Chairman.

Sorry I was not here for your earlier testimony, Mr. Kammer, but I will try to make up for lost time. Just so I understand our current alphabet soup, our Manufacturing Technology Centers are the result of the Trade Act provisions of a few years back; is that correct?

Mr. KAMMER. Yes, sir.

Mr. SKAGGS. All right.

I also assume that you are still accepting proposals for fiscal 1994 funding? I mean, the door hasn't closed, and this is very much an ongoing process?

Mr. KAMMER. That is right, yes.

Mr. SKAGGS. When you said this is a request-driven process, we might still get some good submissions.

Mr. KAMMER. The defense conversion advertisement will become an official advertisement on May 14th of this year. It closes in mid-July. We hope to have a further proposal for another two MTCs in 1994.

Mr. SKAGGS. It has seemed to me in the efforts I have made to try to understand technology transfer, and the ingredients in its success or failure, that in addition to educating the private sector about what is available in the universities and the government laboratories to be transferred, there is also education to be done on the supply side. The bench scientists and technicians at NIST, for instance, in thinking about the application of the work that they are doing in a different kind of way, are engaged in what might lay out there.

I am going to invite you to comment on what you all are doing to change the internal culture at NIST to think that way.

Mr. KAMMER. It is a very interesting problem. As I know you know, about half of NIST's technical professional staff have Ph.D.'s; we have about 780 Ph.D.'s, as I recall. The nature of these people, mostly physicists, chemists, electronics engineers, is not necessarily immediately the same kind of personality or value system as you would expect to find on the shop floor, and you do have kind of a cultural issue here.

One of the things that we have done is, we have developed a very aggressive program with CRADAs, the Cooperative Research and Development Agreements; and NIST at the moment, I am proud to say, has the highest per capita ratio of CRADAs of any Agency in government. The total is at 380, as I recall, the second highest to DOE. But that is all of DOE, as compared to little NIST.

So we have also tried to create a system where people value the kinds of accomplishments that come from this.

The culture at NIST for many years valued producing technical papers, the admiration of your peer group, probably other Ph.D.'s in the technical area, and we do not want to lose that because out of that comes technical excellence, and that is very important. But we have tried to add to it, also, admiration for people that accomplish something with specific industries or with general industries, and a number of the leaders of the organization now are people who are very proficient.

Mr. SKAGGS. Maybe you could for the record, rather than taking a little time right now, summarize what the reward structure is at NIST that is geared to this particular set of objectives.

Mr. KAMMER. I would be happy to.

[The information follows:]

REWARD STRUCTURE FOR NEW PROGRAM DIRECTION

For its over 90 years of existence, NIST/NBS has worked extensively with industry to solve a number of critical problems. As NIST has evolved from NBS, we have created new programs to assist industry, and initiated cultural changes to provide these programs with the appropriate level of support, and to adequately reward those people who work in those programs. An essential part of this change was the initiation of the NIST Personnel Demonstration Program which allowed us to create a performance-based evaluation and reward system. For scientists and engineers in the traditional NIST programs, this means that their performance is based on their ability to advance the state of metrology and standards, generally in the form of new measurement methods, methodologies, standard reference materials, standard reference data, standards development and testing. The measure of how good these advances are is ultimately determined by publication in peer-reviewed journals and acceptance as industry-wide measurement methods, materials, or data. The peer-review system is an essential part of the evaluation because it allows other experts in the field to assess the results and is in part a self-correcting mechanism because work which is not good will not be accepted in the user community, and will encourage the scientist or engineer to pursue other areas.

For most of its recent history, this is how NIST operated, and the results of its research were transferred in the form of publications, workshops, seminars, participation on standards committees, and other measurable transfer mechanisms, which are part of the performance-based evaluation system. With the advent of new programs, such as the Advanced Technology Program and the Manufacturing Technology Centers program, and technology transfer mechanisms, such as cooperative research and development agreements, new performance measures are being created, and employee performance is evaluated against those new measures. NIST scientists and engineers are now beginning to be evaluated on performance measures such as CRADA development and support to ATP awardees, as well as standards work, publications, and collaborations with industrial firms.

Mr. SKAGGS. A related question, looking particularly at the great expansion of the ATP program that the President's plan envisions, is how we make sure that we have established a set of objectives that lend themselves to measurement, and how we evaluate the success of the ATP program as we go along against those standards. This came up a couple of days ago when we were talking to the IG and to the Minority Business Development Agency.

How do you know if you have got a win, and is there some toughmindedness being brought to the table in that regard?

Mr. KAMMER. There are two different levels that one has to focus on. One is the process level, in the sense that one does not want to, as lamentably has happened from time to time, get in the position of being a granting program that sort of loses track of its money, shall we say. And part of the process that we put in play is, we have invited the IG to be our house auditor for all of our winning projects; and they are indeed doing that on 100 percent of the projects. The IG, as you no doubt know from conversation with him, is a remarkably independent person; and I am confident that he will always share with me his opinion, if we are going wrong.

On the level that is really the result—I was having a discussion with Mr. Price earlier in which——

Mr. SKAGGS. I got in on the tail end of that.

Mr. KAMMER. It seems to me jobs, economic activity, is directly related to the specific projects that we have funded as the appropriate measure. We have an evaluation project planned for each, we have a definition of success for each project; we have an individual who is trained in business planning and evaluation as well as in economics, who is in charge of this evaluation process; and we have a scheme for doing it.

We are gathering data now, we are not reaching many conclusions yet, and we are not expecting there to be many results yet. But that is an awfully important part of the process.

If it turns out that this is a poor idea, that is valuable data.

Mr. SKAGGS. Again to submit for the record—recognizing that this is still early on and there's some pathfinding work to be done—if you might select the best example of measurable objectives that were established at the outset and how well we are able to evaluate so far in an ATP that is under way. That will give us, I think, a fix on that.

Mr. KAMMER. Sure.

[The information follows:]

Measurement Objectives Example for ATP

First, let me give a brief overview of how measurable objectives are established at the outset of each project; how progress towards meeting those objectives is tracked for each project as it is carried out; and how technical and economic success are defined and measured for each project.

As an integral part of the proposal process, applicants are required to define both the overall technical goal of their projects and to list specific objectives of every task. Applicants are further required to contrast the state of the art before the beginning of their ATP project with the state of the art after completion of the project. This helps to establish a baseline for describing the status of key elements of the technology at the initiation, as well as to establish the specific targets by which technical success will be defined. These may include initial per-unit-costs, physical performance characteristics, or specific technical capabilities. The technical baseline is clarified and technical goals and objectives are typically specified in more detail as part of the startup of a project. Likewise, a commercialization strategy is defined at the outset of a project. The commercialization strategy for each project is typically refined, updated, and expanded as the project progresses. Technical and commercialization progress is tracked for each project throughout its life, and specific accomplishments are compared against the established goals and objectives. Quarterly progress reports, periodic site visits, detailed end-of-year reviews, frequent interaction between project staff and ATP staff, and special studies serve to monitor and measure progress on an on-going basis.

The specific example that follows, illustrates how we have established measurable objectives at the outset of each project and evaluate progress through the life of the project. This example pertains to a small company with a highly focused technology development program.

In its first round of awards, ATP funded Nonvolatile Electronics, Inc. (NVE), a small Minnesota-based company, in a 3-year project to process the technology required for producing fast, high-density, nonvolatile and non-destructive integrated circuit memory and logic circuits. These circuits will be capable of unlimited read/write cycles at a cost low enough for large-volume use in computers and other consumer electronic devices. Full success of the project would see the magnetoresistive random access memory (MRAM) technology become widely used in mass data storage subsystems; integrated circuit chips; sensors; and computer systems. The MRAMs would become an important new product to assist U.S. chip makers regain their competitive position. Even if market penetration of MRAMs turns out to be limited, the project is expected to contribute significantly to understanding magnetic properties and materials important to a variety of applications, such as read heads for disk and tape drives.

NVE was founded by the co-inventor of MRAM cells at Honeywell, where the technology was developed for low-volume, high-cost, specialized-performance defense and aeronautical applications. In a friendly spinoff from Honeywell, NVE obtained an exclusive license to develop MRAM technology for commercial applications. The ATP-funded project identified three high-risk technical barriers to developing the technology for commercial applications that required the following three major breakthroughs: (1) to increase the magnetoresistance in the cell from 2 percent (the level existing for the military/space application at the project's outset) to approximately 10 percent for greater device speed; (2) to reduce support circuit areas by a factor of 2 or more for increased density and decreased size; and (3) to demonstrate a yield rate of 99.99 percent for the highly resistive, high density cell (this cell could not be produced at all at the outset of the project). Expert scientists working in the fields of magnetoresistivity, electronic packaging, and device production agreed that these breakthroughs would be extremely challenging to achieve, but had a very high pay-off potential for widespread application of the technology if they could be accomplished. The company had been unable to obtain sufficient venture capital to pursue full development of the technology because of the high technical risks. ATP funding allowed the company to more than triple its technical staff during a time that the Minneapolis areas was hard hit by cutbacks at high-tech companies, and pursue all three breakthroughs at once in a coordinated program.

As the second year ends, the project is on schedule: NVE has modeled, built, and tested Giant Magnetoresistance samples, and reports raising magnetoresistance from the 2 percent stated level to about 7.5 percent, using materials suitable for MRAMs. The company has invented and is testing a new mode of operation--not envisioned at the outset of the project--which may give a 2-3 times improvement in signal and reduce the magnetoresistivity requirement from 10 percent to 4 or 5 percent. NVE is simultaneously pursuing the use of multilayers in MRAMs which is a promising approach to greatly exceeding the 10 percent goal. With respect to the second quantified objective of increasing circuit density, NVE has written 2 patent disclosures for techniques that will achieve the circuit density goal, has since intensified the goal, and has undertaken a joint program with Micron, the largest U.S. merchant supplier of dynamic random access memory (DRAMs) for fabrication of very dense cells, with the current goal of demonstrating MRAM cells with photolithography down to 0.35 micron. With respect to the third quantified objective of achieving producibility, the 99.99 percent yield goal has been achieved for a 16K version of the cell, and the company is shifting focus to much smaller, denser cells using new magnetoresistive materials. NVE has received critical support on the MRAM project from several NIST in-house programs.

A significant development for transferring the materials aspects of NVE's technology to the development of advanced read heads for disk and tape drives has recently occurred. NVE has joined the National Storage Industry Consortium (NSIC), a joint venture funded by ATP to develop technology for ultra-high-density magnetic recording heads for mass data storage, expected to be 100 times better than today's best commercial devices. NVE's practical experience and head start with the development of GMR materials promises to advance the work of NSIC. The read head business alone is approaching $1 billion, and it in turn provides key components to a U.S. driven business of roughly $50 billion. In addition, NVE is sharing technical information with Honeywell and NASA for defense and space applications.

I hope this example will give you a good idea of how we establish goals, objectives, and baselines for all of the projects upfront and track their progress towards achieving the goals and objectives over the duration of the projects. As I explained earlier, the measurement of long-run impact requires time for commercialization to occur following the end of the research work, and it is too early in our history to provide examples of long-run measures.

BOULDER FACILITIES MODERNIZATION

Mr. SKAGGS. If I can take just a couple of minutes to deal with parochial issues having to do with the Boulder campus.

Do you have a sense yet of what the split is going to be between Gaithersburg and Boulder of the $62 million for infrastructure improvements that you have requested?

Mr. KAMMER. Yes, sir.

Mr. SKAGGS. Was that laid out in the President's budget? If it was, I don't want to take time.

Mr. KAMMER. It is not in the President's budget. Of the $62 million, in 1994 we expect to expend $31.9 in Gaithersburg, and $18.7 million in Boulder.

The ultimate plan is to have total expenditures of $540 million that we contemplate spending on infrastructure. That is about $213 million in Boulder and $326 million in Gaithersburg. The reasons for the relatively larger percentage in Boulder are that the Boulder facility is only 10 years older—it was dedicated in the early 1950s—and the individuals who took it over for the government got what, in my opinion, was an office building design instead and said "if you want a laboratory, call it a laboratory." And it is far more unsuitable for the purposes that we bring to it.

Mr. SKAGGS. It does have a certain 1950s charm to it, but it doesn't lend itself to the present purpose, as you point out.

Let me just make a very strong statement. This will come as no surprise to you. I am delighted to see that kind of projected investment in what I think is a nationally valuable resource that I am proud to have in the district I represent.

That community is highly sensitive about its community planning process. To the extent that we can get a jump now on the implications that that kind of investment in the Boulder campus carries over the next several years, it will make your and my life enormously more pleasurable next year and the year after, assuming that we are both still doing this.

So we really need to get to work hard and fast on that. I mean those are big numbers and carry big implications, everything from utilities to traffic to what have you.

Mr. KAMMER. Having had some experience up until now on that issue, I certainly agree.

Mr. SKAGGS. Let me just invite you, or whomever Mr. Lyons wishes to designate, for this enviable chore. If we can actually make some contacts in the near term to figure out who's going to be doing what and how we can get a combined task force put together on that.

Mr. KAMMER. We will work with your office.

BOULDER LABORATORY PERSONNEL

Mr. SKAGGS. Great. We have been getting some communications lately from people who are being laid off in the Boulder labs, driven, I think, by budgetary considerations that now seem to be overtaken by the new administration's plans. Yet they are sort of caught in the crack here, computer people, for instance. It is fairly small, but to the people affected, the RIF is a very serious one.

Is that being reexamined, and if not, why not; and if so, what is the timetable?

Mr. Kammer. I did look at it again in light of the changed budgetary conditions. The reason was it was a change in work needs more than it was a change in money, as I understood it, and also a desire to move some of the activities in Boulder to Gaithersburg—as I know you are familiar with since you did a personal study of it. I am persuaded it is a benefit to the institution, while it does have an effect on the individuals. But I do believe it is justified.

Mr. Skaggs. Are the individuals in Boulder being given the option of relocating?

Mr. Kammer. Yes, sir. I believe there are three activities, totaling 14 individuals, and six or seven of them are relocations. Those people have the longevity to relocate.

Mr. Skaggs. With appropriate assistance for moves?

Mr. Kammer. That is right, full normal moving expenses.

Mr. Skaggs. And this is all part of the notice that I think I received last fall about the change?

Mr. Kammer. Yes. We have been planning this for some time.

You hate to do this kind of thing, but you have to try to give the staff at least the opportunity to plan.

Mr. Skaggs. Thank you, Mr. Chairman.

MANUFACTURING EXTENSION PROGRAM

Mr. Smith. Mr. Price.

Mr. Price. I would like to return to the manufacturing extension program. Some of my questions have been answered, but I would like to probe a bit more as to what the organizational shape of all this is going to be and how it is going to intersect with existing efforts.

You described the goal of a single integrated program for continuous technological advancement. It is an admirable goal. I would like to just see what you can tell me about the organizational implications of that. We are talking about a $12 million increase for technical assistance to small- or medium-sized manufacturing companies. This money, as I understand it, would establish Manufacturing Outreach Centers, which you describe as smaller versions of the current MTCs to increase the number of Manufacturing Technology Centers themselves, to increase support for State technology extension efforts, and begin the development of electronic and other networking links between these centers and other technology sources and extension outlets.

Then, of course, we also have in the mix, Small Business Technology Development Centers, which certainly in my State has been a valuable resource. We have the Minority Small Business Development Centers. I am not saying this multiplicity is necessarily a bad thing. I am certain there are different objectives and different functions which these various entities perform.

At the same time, it is a bewildering array. I wonder if you could shed some light on how you propose to integrate all this and what the continuing role of all these different entities would be.

Mr. Kammer. I can rationalize parts of it. We could not presume to rationalize the entire Federal Government structure. We have a good relationship with the SBA activities, which we sought out, and we signed a memorandum of understanding with them. We do not view ourselves, for instance, as particularly talented in evaluating the loan-worthiness or the credit implications of a particular firm. The SBDCs are able to do that and also able to help get money, which is often an integral part of upgrading the firm.

I mean, they need to make investments. We can tell they need to spend more money, but we do not know what is a wise decision for them. At the same time, the SBA people are relying on us to do technical evaluations for them, a resource they don't have internally and probably never will.

Mr. PRICE. What about the SBTDCs, the kind of role they play and how it would complement these new Manufacturing Outreach Centers? Does the memorandum of understanding address that?

Mr. KAMMER. It does not. It is focused more on the SBDC's and the traditional business consulting kinds of services. I do not actually know what SBTDC is.

Mr. PRICE. Small Business Technology Development Centers.

Mr. SMITH. I wrote the bill. We have matching grants with States, all 50 States have it. These Small Business Development Centers are university based. They help in developing, planning, cash flow, and all these additional things that a small business needs to know. In addition to what this new program proposed by the Science and Technology Committee would do, it melds right in as one step below your MTC. That is where the SBDCs come in.

I think it is a duplication to try to start this new program. This one does a lot more.

Mr. KAMMER. The phrase I was familiar with was the Small Business Development Centers. Is there a different kind?

Mr. SMITH. No.

[CLERK'S NOTE.—Subsequent to the hearing, the Small Business Administration confirmed that the North Carolina SBDC program is called a Small Business Technology Development Center. There is no difference between North Carolina's SBTDC and the national SBDC program.]

Mr. KAMMER. The Small Business Technology Development Centers is a concept I am unfamiliar with.

Mr. SMITH. You have a good one in North Carolina.

Mr. PRICE. We have several in North Carolina.

Mr. SMITH. Yes, the university has the contract. The State matches the money. Then they have programs out in different places in the State.

Mr. PRICE. Yes, and there is a wide range of consultation services which these centers offer, and something coming very close to this kind of technology extension in some cases.

Mr. SMITH. Yes, except they don't pretend to tell a manufacturer how to set up roadblocks and things like that. They tend to analyze whether or not it is feasible for them to get into a certain business, and give them a plan that they need to go to the bank, give them a relationship with a bank and things like that. But they don't do the thing that the MTC does.

Mr. PRICE. Well, that is one question, I think, how we coordinate the existing network of service centers that are out there sometimes under the control of different Federal agencies.

Mr. SMITH. I might add, at the beginning of the year, this January or February, this new Administration proposed doing away with SBDCs, just like the last ones did. But since then, they have turned around and submitted a budget for SBDCs, recognizing, I think, that it is an integrated part of this whole program of technology transfer.

Mr. PRICE. Beyond that, of course, we have some of these entities within the same program. How would you compare these Manufacturing Outreach Centers to the MTCs? What is the distinction there?

Mr. KAMMER. Well, their focus is on a lesser population of firms, if you will. A MTC is focused on 5,000 to 7,000; perhaps 1,500 or 2,000 would be the normal focus for the MOC. The capacity on site in the center would be less, in the sense that there would be fewer people who, perhaps of necessity, would have a smaller knowledge base.

We hope to be able to equip them with enough electronic access to NIST and to other MOCs so that they are able to consult and get data that way.

We also are trying to reach for a concept that might allow us to provide these kind of services in rural areas or in association with community colleges and the like that may build on that kind of a concept. Having not yet established any of them, you know, I think there is some learning-by-doing that we have to do here.

Mr. PRICE. I don't mean to get hung up with organizational charts and organizational job descriptions. I think there is probably some room for multiplicity here and even overlap. I think it is important that we get on with the job of making these kinds of consultative services available. We do need to make certain that we don't compromise the mission of those agencies and offices that are already doing well, and we don't want to reinvent the wheel as we take this activity to a higher level.

Mr. KAMMER. Sir, I would like to do some research and provide something for the record on the difference between the MTCs and the Small Business Technology Development Centers. I think I need to educate myself first.

Mr. PRICE. I think that would be very helpful. We are going to do some more here as well. Thank you.

[The information follows:]

RELATIONSHIP BETWEEN MEP/SBDC

A major premise of the MEP plan is to build upon and link with existing resources—both sources of technology and delivery systems.

NIST management has worked and met with the Association of Small Business Development Centers and with state SBDC directors in some states the accomplish a complimentary approach.

SBDC's differ among themselves, both at the state level and individually. The following points are generally applicable, though there are exceptions.

Target populations differ between SBDCs and MTCs/MOCs.

MTCs/MOCs are intended to serve small manufacturing firms.

SBDCs serve all small businesses, generally focusing on non-manufacturing firms.

Nature of services provided differ.

MTCs/MOCs are intended to advance the technology level of small manufacturing firms; they provide access to the full range of management, training, etc. through linkages with other organizations.

SBDCs provide business and management services to all small businesses.

SBDCs will be nodes on the nationwide manufacturing extension network to provide business and management services.

SBDC agents are already co-located at some MTCs.

SBDC's are members of proposal teams which are forming to compete for defense conversion extension funding which will make up a part of the MEP network.

A key concept of the Manufacturing Extension Partnership is that NIST does not propose forming new organizations called MOCs. To the greatest extent possible, MOC funding grants will be provided to existing organizations or groups of organizations which intend to carry out the objectives of H.R. 820 and S. 4 by advancing the technology level and competitiveness of small manufacturing firms. SBDCs are natural elements of, or partners to these proposing groups.

According to the SBA, the SBTDC (Small Business Technical Development Center) located in North Carolina is the only one of its kind in the SBDC network. It performs the same business and management type functions as the other SBDCs described above, and, in addition, they have a special emphasis on encouraging small businesses to seek patents on their work and to link with the technology resource centers in North Carolina. Although there is no specific emphasis on manufacturing technology per se, this SBTDC could potentially receive an MOC grant, however, all awards are made based on open competition.

Mr. SMITH. Thank you very much.

The hearing is adjourned.

[The following questions were submitted to be answered for the record:]

COMMERCE DEPARTMENT

TECHNOLOGY ADMINISTRATION

QUESTIONS FOR THE RECORD

SUBMITTED BY CHAIRMAN NEAL SMITH

U.S.-Japan Manufacturing Technology Fellowship

QUESTION:

You are requesting an increase of $500,000 to implement the U.S.-Japan Manufacturing Technology Fellowship (MTF) Program. You refer to the placement of American personnel in Japanese manufacturing firms. Is there a corresponding component that will place Japanese personnel in American firms?

ANSWER:

No, the Manufacturing Technology Fellowship Program is designed to place U.S. manufacturing engineers into Japanese firms only. Japan has developed great strength in manufacturing and it has been increasingly evident that the United States has much to learn from Japanese methods.

QUESTION:

On page TA-5 of your justifications, it states that approximately 60 American manufacturing engineers will be placed in Japanese firms for up to one year. Have specific Japanese firms been selected to participate in this program? What portion of the costs of this program will be borne by the participating firms?

ANSWER:

Yes, Japan's MITI has identified 66 candidate Japanese manufacturing companies which can accommodate up to 100 Fellows the first year. Costs are distributed between the sponsoring company (U.S.) and host company (Japan). The sponsoring company is responsible for the Fellow's salary, benefits, and all domestic and international travel associated with the Program. The host company is responsible for housing during the Fellow's stay, and any travel associated with the Fellow's position with the host company.

QUESTION:

How will the American participants in the program be selected? Will their employers be responsible for sharing in the costs of the program?

ANSWER

There is a minimum set of established criteria as stated in the application package. The actual acceptance of a Fellow is dependent on matching applicants to host companies, a responsibility of the U.S. Department of Commerce and the Japan External Trade Organization (JETRO). The sponsoring company is responsible for the Fellow's salary, benefits, and all domestic and international travel costs associated with the Program.

QUESTION:

What sort of training will be provided to the participants selected for the program on the Japanese language and cultural traditions? Will you be working at all with the Japan-U.S. Friendship Commission (also funded under this Subcommittee's jurisdiction) on developing this program?

ANSWER

The Fellows will have approximately 4 months of intensive Japanese language and cultural training. The first three months will be sponsored domestically by the Department of Commerce. The last month is sponsored in Japan by JETRO. The training will be progressively tailored toward manufacturing language skills and the cultural experiences associated with a manufacturing corporate and social environment. The Japan-U.S. Friendship Commission as well as several other government and nonprofit educational organizations have been consulted for advice and recommendations regarding the training and the MTF Program.

QUESTION:

What specific activities will the requested $500,000 for the MTF program provide? Are any funds included for the oversight of this program?

ANSWER

The funding will cover the Japanese language and cultural training, Program promotion, Embassy facilitation, and Japan Technology Program (JTP) staffing. A portion of the funds provides Program oversight and management through JTP staffing.

Innovative Technology Policy and Programs

QUESTION:

You are requesting an additional $500,000 increase for the support of technology policies and private sector strategies which will enable U.S. businesses to become more competitive. Your justification list several efforts you will be involved in toward accomplishing this goal, but how exactly will the $500,000 request be distributed among these activities?

ANSWER

The additional $500,000 requested to implement innovative technology policies and programs will be distributed as follows:

- Enable the TA to facilitate the establishment of multi-business Strategic Partnerships with the private sector and promote government-industry-academic partnerships by sponsoring follow-on activities stemming from the highly successful National Technology Initiative conferences held in FY 1992 and 1993 - $220,000.
- Develop innovative technology financing, commercialization, and transfer policies and programs, and increase public visibility for the Administration in the awarding of the National Medal for Technology - $70,000.
- Expand on-going cooperative activities between the Departments of Commerce and Labor in order to create jobs and stimulate U.S. economic growth - $80,000.
- Expand the Intelligent Manufacturing Systems (IMS) program and enhance international technology policy activities such as the negotiation of additional multi-national S&T Agreements - $130,000

QUESTION:

One activity you focus on in your justifications is facilitating the establishment of multi-business Strategic Partnerships with the private sector. How do you propose to accomplish this, and how will this effort differ from the Advanced Technology Program (ATP) under NIST?

ANSWER

The Strategic Partnership Initiative (SPI) brings the "stakeholders" (users, suppliers and core producer) of large-scale enabling technologies together to encourage the formation of teams of companies and other organizations which desire to pursue the creation and commercialization of such a technology. A strategic partnership can share risks and development costs and achieve maximum speed to the market with the resulting products. Such teams will be very different from, and more efficient than, current multi-firm ventures. The SPI has no funds for R&D like the ATP. On the other hand, the ATP does not help firms organize themselves into teams, which would be inappropriate for a grant oriented program.

SPI-encouraged teams, once formed, might or might not apply for funding under the ATP or other Government-sponsored grant programs. While the SPI was created as an entirely separate effort from R&D grant programs, several of the Government funding programs are now encouraging team efforts. Where ventures formed under the SPI do subsequently apply for ATP funding, the SPI would have functioned as a pre-proposal organizational service.

QUESTION:

You also refer to developing innovative financing and commercialization policies and programs. Is the Department currently working with the Treasury Department, the Small Business Administration, and/or the banking regulatory agencies to develop these policies?

ANSWER

We have worked closely with the Treasury Department in the past and plan to continue to do so when the new team of appointees is in place. We have also had discussions with the Securities and Exchange Commission (SEC) and the Pension Benefit Guarantee Corporation. The Department has been in consultation with the Small Business Administration (SBA) and has participated in small working groups addressing many of the current regulatory banking issues. We have addressed small business financing in other fora, such as the National Technology Initiative (NTI) conferences.

QUESTION:

Another area you refer to in the description of your requested increase is the expansion of the Intelligent Manufacturing Systems (IMS) program involving international cooperative agreements. What specifically is the IMS program, and who participates in the program? How is the IMS program currently funded?

ANSWER:

The Intelligent Manufacturing Systems (IMS) is an initiative to determine the feasibility of international collaborative R&D in advanced manufacturing and its industrial deployment. Industry is leading the initiative with academia and government participation from Australia, Canada, the European Community (EC), the European Free Trade Association (EFTA) countries, Japan and the United States. There is currently no line item budgeting for IMS but the initiative will become a full-scale program in FY 1994. Staffing and oversight resources are funded from the Japan Technology Program and through acquiring Technology Fellows from other agencies when possible.

QUESTION:

The budget justifications (page TA-28) show personnel costs related to this program increase, but no corresponding increase in FTE. Would you explain this phenomenon?

ANSWER:

In FY 1993, TA has a total of 41 appropriated full-time equivalent (FTE) workyears and 2 reimbursable FTE workyears. The 1994 request provides funding to support these reimbursable workyears with direct appropriations.

Status of Appointments

QUESTION:

What is the status of nominations and appointments to the Presidentially appointed positions in the technology programs at the Department of Commerce?

ANSWER:

Currently, Ms. Arati Prabhakar has been nominated as the Director of the National Institute of Standards and Technology (NIST). Confirmation hearings for Ms. Prabhakar have not yet been held. Mr. Mark Bohannon has been named Acting Deputy Under Secretary for Technology Administration. Consideration of and interviews for the other Presidentially appointed positions in the Technology Administration are currently underway. There are two within TA: The Under Secretary for Technology and the Assistant Secretary for Technology Policy.

QUESTION:

Which of these positions require Senate confirmation? Have hearings been scheduled on these?

ANSWER:

Senate confirmation is required for the positions of Under Secretary for Technology and the Assistant Secretary for Technology Policy. In addition, the position of Director for NIST requires Senate confirmation. To date, no hearings have been scheduled for these positions.

National Technology Initiative

QUESTION:

Last year, the Technology Administration was deeply involved in the Department's National Technology Initiative (NTI). Your justifications refer to follow-on activities stemming from the NTI conferences. What are these follow-on activities? Do you consider the NTI to be a success, and on what basis do you make that determination?

ANSWER:

Follow-on activities include such things as sponsoring government-industry-academia roundtable discussions focused on specific technology issues such as technology financing strategies, technology transfer programs, and effective technology commercialization strategies and programs. We consider the NTI conferences to be highly successful. They served as invaluable fora in which to bring together government, private sector, and academic representatives. In addition, the themes for each conference were developed to fit the primary industrial/technology employment focus in the respective locations.

QUESTION:

How many National Technology Initiative conferences were conducted, and in what cities were they located? Who participated in conducting the conferences, and what was the audience for the conferences?

ANSWER:

There were 15 NTI conferences held in total. The Technology Administration had the lead role in sponsoring these conferences. They were held in the following cities:

Location	Date	Themes
Cambridge, Massachusetts	2-12-92	Environment Biotechnology
Austin, Texas	3-04-92	Energy Electronics
Orlando, Florida	3-24-92	Aerospace Food Technologies
Research Triangle, North Carolina	4-09-92	Biotechnology Environment

Cleveland, Ohio	4-23-92	Materials Adv. Manufacturing
Seattle, Washington	5-14-92	Transportation Environment
Pasadena, California	5-29-92	Aerospace Biotechnology Environment
Golden, Colorado	6-11-92	Natural Resources Communications
Kansas City, Missouri	6-25-92	Agriculture Adv. Manufacturing
Gaithersburg, Maryland	7-09-92	Life Sciences Information Systems
Chicago, Illinois	9-25-92	Materials Biotechnology
Palo Alto, California	10-25-92	Environment Information Systems
Pittsburgh, Pennsylvania	10-27-92	Information Systems Life Sciences
Stonybrook, New York	11-13-92	Transportation Materials Information Systems
Baltimore, Maryland	12-01-92	Environment Aerospace

The participants sponsoring the NTI conferences included: the Technology Administration; NASA; the Departments of Energy and Transportation; and the Environmental Protection Agency.

The audiences for the conferences consisted of agency representatives across the government; private sector representatives from a broad range of business and industrial firms; and academic representatives from the respective co-sponsoring Universities and local area colleges.

QUESTION:

Are any NTI conferences being conducted in FY 1993?

ANSWER:

There were four NTI conferences conducted in the Fall of FY 1993. These included the NTI conferences held in Palo Alto, California, Pittsburgh, Pennsylvania, Stonybrook, New York, and Baltimore, Maryland.

Request to OMB

QUESTION:

What was your initial request to OMB, what items were eliminated from your request, and what will be the impact of these reductions on your ongoing operations?

ANSWER:

The Technology Administration's 1994 request to the Office of Management and Budget (OMB) included a total of 55 positions, 52 FTE workyears, and $7,620,000 in budget authority. The request reflected a program increase of 11 positions, 8 FTE workyears, and $1,423,000 in new budget authority. The requested increases in positions and FTE workyears were not approved. In addition, resources to establish a European Technology Program similar in concept to the Japan Technology were not authorized.

However, the OMB allowance will enable the Technology Administration to continue to move forward with the important U.S.-Japan Manufacturing Technology Fellowship Program. Moreover, the President's 1994 budget for the Technology Administration provides a 17 percent increase in funding over the amount available in 1993. This increased level of funding will enable the Technology Administration to move forward with its critical technology policy and program activities.

Status of Authorization

QUESTION:

What is the status of your authorization for fiscal year 1994? Are there any major changes proposed in your mandated responsibilities from previous years?

ANSWER:

Both the Senate and House Subcommittee mark-ups on the authorizing legislation for the Technology Administration, S.4 and H.R. 820, are scheduled for the week of April 28, 1993. A significant change in the proposed authorizing legislation is the benchmarking provision which requires the Technology Administration to collect information measuring its technology standards and achievements against those of foreign countries. In addition, the authorizing legislation includes some new, creative financing programs. However, these initiatives are scheduled for implementation in FY 1995.

QUESTION:

Please provide for the record a comparison of the various authorization proposals for technology programs and crosswalk that comparison with the Department of Commerce budget request for technology programs.

ANSWER:

The Clinton Administration is requesting $5,425,000 for Technology Administration programs for FY 1994. These include the personnel and programs in the Office of the Under Secretary and Office of the Assistant Secretary for Technology Policy, and an additional $500,000 for the U.S.-Japan Manufacturing Technology Fellowship Program.

H.R. 820, as ordered reported by the House Science Committee on April 29, 1993 authorizes $5,425,000 for these purposes for FY 1994. In addition, it authorizes $1,000,000 for a new civilian technology loan program (rising to $20,000,000 in FY 1995), $1,000,000 for a new venture capital program for small high technology startups (rising to $50,000,000 in FY 1995), and $2,000,000 for a new benchmarking program aimed at assessing foreign technology capabilities relative to our own.

We can only describe the authorization levels in S. 4 as introduced as that bill has not yet gone to markup. As introduced, S. 4 would authorize $12 million for the programs budgeted at $5,425,000 ($5,000,000 each for the Office of the Under Secretary and Assistant Secretary and another $2,000,000 for the Japan Technical Literature Program).

For FY 1994, S. 4 also authorizes $1,500,000 for benchmarking activities. For fiscal years 1994-1995, it authorizes $60,000,000 for a new civilian technology loan program, $105,000,000 for a new venture capital program, and $25,000,000 for a new program of financial assistance to state technology assistance programs. The Senate may follow the House lead and push these expensive new programs back to FY 1995. Finally, S. 4 would fund an American Workforce Quality Partnership Program at $50,000,000 for each of fiscal years 1994 and 1995.

National Technical Information Service

QUESTION:

The Committee provided an appropriation of $8 million for the National Technical Information Service (NTIS). This amount has been reduced slightly through the transfers approved by the Committee earlier in the year, but what is the status of the funding and the problems being experienced by NTIS?

ANSWER:

The $8 million appropriation was reduced by $200 thousand as a result of the transfer. Of the remaining $7.8 million, $5 million has been obligated to repay customer accounts. This amount had been used improperly (an action that was determined to be a violation of the Antideficiency Act) by NTIS in the past to finance its operations. Approximately $1 million will be used by NTIS to begin its much needed modernization initiative. The remaining amount will be used as a source of working capital to be used in the event the organization experiences low cash flow periods. The appropriation and authority to establish a Public Enterprise Revolving Fund resolves the antideficiency violation and should permanently resolve NTIS' financing problems.

QUESTION:

Will the FY 1993 appropriation for this account remedy all of the ongoing problems at NTIS? Is there any possibility that additional appropriations will be required in the future?

ANSWER:

The 1993 NTIS appropriation has allowed NTIS to repay used, unearned customer accounts and should resolve its financing problems. Appropriations will not be required in the future to finance NTIS' on-going, self-supporting programs.

SUBMITTED BY CONGRESSMAN ALAN B. MOLLOHAN

QUESTION:

The commerce-chaired interagency committee on federal technology transfer has been wrestling with upgrading data on ongoing research in federal laboratories to expedite commercialization by U.S. industry. Could you please update me on the progress of reformatting the federal research in progress database (FEDRIP) as well as your efforts to ensure that this information is shared with the National Technology Transfer Center so that U.S. industry can take advantage of this resource?

ANSWER:

The Commerce-chaired Interagency Committee on Federal Technology Transfer is seeking to develop a user-friendly format that would enable FEDRIP users to quickly and easily find information about R&D projects funded by Federal agencies at Federal laboratories and universities. In this effort, the Committee has met with industry to get industry input regarding the type of information and format that it would find most useful. The Committee is working with Federal agencies to obtain broader agency participation and cooperation in providing more complete information on projects, more frequent updating of information, and lab or agency contact points. The Committee and NTTC are exploring means of cooperation through which NTTC could make the FEDRIP database more widely available to industry. The Committee and NTTC are also working together on a project to measure and evaluate the impact of government technology transfer activities under the Stevenson-Wydler Act.

QUESTION:

Current legislation envisions an expanded role for the Department of Commerce in assisting U.S. industry in upgrading its manufacturing base (H.R. 820). An important component in this effort is our unparalleled federal laboratory system. Could you please advise the subcommittee on current efforts to integrate in this effort, resources like the NASA-funded National Technology Transfer Center to ensure that we are not recreating existing resources?

ANSWER:

The Manufacturing Extension Partnership is a nationwide network that links service-providers and technology sources. The nodes on the network are (or will be) Manufacturing Technology Centers (MTCs); Manufacturing

Outreach Centers (MOCs); the State Technology Extension Program (STEP); state industrial extension organizations; NIST, DOE, NASA, DOD, and other Federal technology transfer activities; community colleges and advanced technology centers; university manufacturing programs and technology transfer centers; and other technology sources and transfer agents, including organizations such as the National Technology Transfer Center. The NTTC can serve as a resource for manufacturing extension field engineers which encounter a company or problem which would be appropriate for considering technology transfer from Federal laboratories. The MEP and NTTC will coordinate activities so that extension field engineers are aware of the services provided by NTTC. In addition, NTTC staff would be educated about the extension program and when it would be appropriate to refer a caller to their local extension center. Integration of electronic databases between the partnership and NTTC may also be possible. NIST has met several times with NTTC staff. A formal Memorandum of Understanding between the organizations was signed in February, 1993, under which the two organizations will establish linkages between their electronic databases and bulletin boards, and other activities as appropriate to ensure that information on technology is made widely available to the MEP.

QUESTION:

I am very impressed with the potential of the Technology Administration's Clearinghouse for State and Local Initiatives. I see this as an important information component for an effective national technology transfer network. I understand the NTTC has offered to work with the Office of Technology Commercialization in the Department of Commerce to upgrade this important resource and provide an additional outlet for dissemination. Please advise me on the status of this project.

ANSWER:

The Clearinghouse for State and Local Initiatives is continuously expanding its information on technology-based economic development programs through improving currency, coverage, and accessibility. More than 700 Federal, State and locally funded, technology-based economic development programs are presently retrievable by computer. NTTC is cooperating with the Clearinghouse to increase the efficiency and timeliness of the program information and greatly increase dissemination through NTTC resources. In addition, the Clearinghouse and the NTTC plan to improve the search and retrieval capabilities of the Clearinghouse database.

QUESTION:

The NTTC has recently initiated a highly-successful pilot program called the Fund for Strategic Partnering that is providing $600,000 in matching money for models linking our federal laboratories, universities, state and local governments and U.S. industries in technology commercialization projects. This appears to dovetail with the Department's Advanced Technology Program (ATP) and the State Technology Extension Program (STEP). Are there plans for providing Commerce assistance for the NTTC's FSP program in light of its complimentary role for Commerce programs?

ANSWER:

At present, we are cooperating with the NTTC under the terms of a Memorandum of Understanding between the organizations that was signed in February, 1993, under which the two organizations will establish linkages between their electronic databases and bulletin boards, and other activities as appropriate to ensure that information on technology is made widely available to both organizations.

National Institute of Standards and Technology

Questions Submitted by Chairman Smith

QUESTION:

What efforts are being taken to ensure that the extension program does not overlap with existing Federal assistance delivery mechanisms such as the Small Business Development Centers (SBDC) program? What interactions will take place with SBDCs and Federally-sponsored assistance programs?

ANSWER:

A major premise of the Manufacturing Extension Partnership (MEP) plan is that it will build upon and link with existing resources -- both sources of technology and delivery systems. NIST has two Memoranda of Understanding with the SBA to (1) assist and coordinate various technical activities and (2) provide collaboration between the 7 existing MTCs and regional SBA offices to provide financial assistance to participating small companies. Existing MTCs, where appropriate, have co-located SBDC agents at MTC sites. NIST management has worked and met with the Association of Small Business Development Centers and with state SBDC directors.

It is possible that in some regions SBDCs may be appropriate hosts for MTCs or MOCs. NIST management has begun to work with the network of SBDCs to develop a common understanding of company needs.

QUESTION:

What will be the impact of not receiving the DoD funds as expected on the FY 1994 budget proposal for MEP?

ANSWER:

If the DoD funds are not available, NIST will undertake development of the nationwide system during FY 1994 at the requested DoC funding level.

QUESTION:

How will the existing "Hollings Centers" (Manufacturing Technology Centers) be impacted by the new, expanded Manufacturing Extension Partnership Program (including DoD funds and the FY 1994 request)? Will the funding levels and ratios be the same for existing centers and new centers?

ANSWER:

Within the MEP plan, funding for MTCs will follow exactly the same pattern as for MTCs. Within DOD's Technology

Reinvestment Project (TRP), we have matched the funding ratios and levels as closely as possible to the MEP plan. There is a 50 percent matching requirement in the TRP, and half of the match must be in cash for proposals that request $1 million per year or more of Federal funds. Within TRP, there are no pre-stated sizes for centers, but they are expected to bear the same relationships between funding level and size of target population.

QUESTION:

What is the status of authorization for this program, as well as the reauthorization of other NIST programs?

ANSWER:

Status as of May 11, 1993: full committee mark-up is planned for H.R. 820 on May 12. It is scheduled for floor action on May 6. Full committee mark-up for S.4 has not been rescheduled.

QUESTION:

The requested increase associated with this Manufacturing Extension Partnership program -- $14 million and 13 positions -- is requested as part of the investment initiatives in the President's budget (along with most of the proposed increases for NIST). This investment proposal relies on Congress increasing the existing budget caps through the budget reconciliation process -- which will be difficult at best. What would be the impact on the NIST long-term strategy of not receiving this "investment" funding as proposed?

ANSWER:

The effect on NIST's long-term strategy of not receiving "investment" funding would be harmful to the target audience - small and medium sized manufacturers. Without an increase in funding the MEP would remain at the same level as in FY 1993. Long-term goals would remain the same, but would be delayed by one year.

QUESTION:

How was it determined which increases would be considered "investments" and which would be designated as ordinary program increases?

ANSWER:

How an increase is determined is best defined in the Administration document, "A Vision of Change for America". On page 21 it states, "To ensure more productive, higher-wage jobs, and greater economic opportunities for ourselves and our children, we need to devote a larger share of our current resources to modernizing factories and equipment, developing skills, and accelerating the advance of technology. . . the investment package was geared to additions to ongoing activities that expand America's capacity to produce and provide more opportunities for current and future workers." All the proposed FY 1994 increases for NIST clearly meet these criteria.

QUESTION:

Your statement (page 9) mentions that by FY 1997, this program (if you continue to receive the proposed funding) will support 19 MTCs, 40 manufacturing outreach centers (MOCs) and 30 state grants. Do you see this as the optimal level for the Manufacturing Extension Partnership program?

ANSWER:

As outlined in the Administration document, "A Vision of Change for America". The current plan is to grow to approximately 100 manufacturing extension centers nationwide. The current plan calls for growth to 20-30 MTCs, development of 75-100 MOCs, STEP grants and building a support and integration infrastructure called LINKS. The numbers were developed after studying the clustering of manufacturers in the U.S.

Investment Proposal

QUESTION:

Most of your requested program increase, particularly that for the Advanced Technology Program and the Manufacturing Extension Partnership -- is included under the investment proposal of the President's budget request which requires an increase in the overall caps through the budget reconciliation process. What was the rationale for this proposal?

ANSWER:

How an increase is determined is best defined in the Administration document, "A Vision of Change for America". On page 21 it states, "To ensure more productive, higher-wage jobs, and greater economic opportunities for ourselves and our children, we need to devote a larger share of our current resources to modernizing factories and equipment, developing skills, and accelerating the advance of technology. . . the investment package was geared to additions to ongoing activities that expand America's capacity to produce and provide more opportunities for current and future workers." All the proposed FY 1994 increases for NIST clearly meet these criteria.

QUESTION:

Why are increases for the ongoing core and external programs for NIST included in the investment package, but funding for facilities construction included in the "base" request. Does this reflect your priorities for funding, or those of the Department and/or OMB?

ANSWER:

The increases for ongoing core and external funding were included in the investment package in accordance with the policy set by the Administration (see previous answer). The facilities construction was a base request, not based on priorities, but because is a decrease over the FY 1993 appropriated level.

High Performance Computing and Communication

QUESTION:

You are requesting an increase of $24 million as part of the multi-agency High Performance Computing and Communications (HPCC) program, which is related to the overall information infrastructure initiative.

Are there any funds in your base for this program? If so, how much?

ANSWER:

The base includes $2.1 million which is focused on Integrated Services Digital Networks (ISDN) standards, advanced software repository and distribution technology, and performance measurement methodology for high performance systems.

QUESTION:

What other agencies are involved in this effort, and how much are these other agencies requesting for FY 1994?

ANSWER:

The agencies involved in this effort include: DoC/NOAA ($24 million); HHS/National Institutes of Health ($24 million); NASA ($12 million); and NSF ($36 million).

QUESTION:

How does the NIST program for HPCC relate to and interact with the National Telecommunications and Information Administration (NTIA) proposal for National Information Infrastructure (NTI) grants, and the overall information infrastructure proposal?

ANSWER:

The NTIA Grant program is an equipment grant program; i.e., provide PC's and "last mile access" to the National Research and Education Network (NREN) for schools and state planning organizations. NIST's clientele is industry and other government agencies. NIST and NTIA both work on and promote ISDN standards with complementary programs. Specifically, NIST works on many other computer and communications standards (e.g., Open Systems Interconnection protocols for local area, metropolitan and wide area networks). NTIA's R&D is focused on Quality of Service measures for radio and telephone applications (including ISDN). NIST's R&D focuses on protocol design, dynamic behavior of communications protocols, and related performance measurement in support of protocol standards development. NIST's work will also support development of application infrastructure focused on manufacturing industries and will coordinate those activities under the HPCC Program.

QUESTION:

Your statement refers to assisting in the development of the National Research and Education Network (NREN). Could you tell the Committee more about this network -- particularly, which agency has the primary responsibility for development of the system? Is there private sector involvement in the development of this network?

ANSWER:

NSF has the coordinating role in the deployment component of the National Research and Education Network (NREN) Program to support the academic research and education community through the NSF net which is part of the interim NREN. However, DoE, NASA, EPA and NIH each support their non-academic clientele via components of the interim NREN/Internet (e.g., Energy Science Net and the Space Science Net). Through joint planning, all agencies depend upon NSF to be the lead agency and source of networking support for the academic community; other agencies efforts complement that of NSF.

ARPA has had the lead and coordinating role in the R&D leading to development of gigabit technology in the NREN component of the Program. The six gigabit testbeds include industrial partners (IBM, MCI, Bell Atlantic, Belcore, AT&T, NYNEX, Pacific Bell, Bell South, and GTE), but NIST has not been funded to participate actively in this component of the Program.

If funds are appropriated, NIST will take a more proactive role in supporting its industrial clientele via network enabled access to its Advanced Manufacturing Systems and Networking Testbed (AMSANT). The AMSANT will be established at NIST and will provide network access to allow conformance and interoperation testing of pre-competitive manufacturing systems and applications (e.g., flexible computer-integrated manufacturing, electronic commerce using Product Data Exchange Standards). As more of the services of the NREN are provided by the private sector, the work NIST has done and continues to do in developing international standards for open computer communications will become more important (e.g., Open Systems Interconnection (OSI) and Integrated Services Digital Network (ISDN)).

QUESTION:

On page 7 of your statement, you refer to the many sectors of the American economy which are dependent on efficient access to information -- banks, insurance, manufacturing, etc. Why are these institutions not playing a more visible role in the development of high performance computing?

ANSWER:

The intent of the statement was to indicate the broad impact of high performance computing and networking technologies on the economy -- not to indicate which industries are initial consumers or will lead in their application. Some of these industries are not usually the developers or users of "leading edge" applications of computing technology, but do use tested computing and networking for their business transactions. Specifically, the banking industry is dependent upon networking for electronic transactions ranging from exchanges between the Federal Reserve System to automated teller machines; we expect this dependence on networking to grow with the introduction of debit cards, and other "smart card" based applications. The insurance industry deploys substantial networks to conduct its business. Recently the pharmaceutical industry has begun to use high performance computers for drug design rather than traditional experimental methods. Advanced materials, aircraft and automotive manufacturing are other industries where high performance computing and networking systems are increasingly important.

QUESTION:

What is the role of NIST in the development of standards relating to the telecommunications industry?

ANSWER:

NIST participates in standards development both nationally and internationally (e.g., American National Standards Institute accredited committees T1 (telecommunications), X3 (data communications) and their international counterparts in the Consultative Committee for International Telephone and Telegraph (CCITT) and International Standards Organization (ISO). NIST has leadership roles in working groups as chairperson, editor and/or rapporteur; as host and sponsor of the North American Integrated Services Digital Network User's Forum (ISDN Forum) and Open Systems Environment Implementor's Workshop (OSI Workshop). NIST staff also participate in the Internet Engineering Task Force (IETF).

In collaboration with industry and the Canadian government, NIST has recently developed the Industry/Government Open System Specification (IGOSS) which is a procurement profile based upon international standards and regional implementation agreements produced by the ISDN Forum and the OSI Workshop. Partners in this collaboration include the manufacturing and technical office communities (MAP/TOP) and the electric power industry (EPRI).

International Trade and Standards

QUESTION:

I am pleased to see that your budget request recognizes the importance of promoting U.S. standards overseas. At the request of this Committee, you have already done some work in Saudi Arabia on standards development, and you have now assigned a standards advisor to the U.S. mission to the European Community located in Brussels. Could you give us your assessment of the program being made in Brussels?

ANSWER:

The representative is providing continuing liaison with the EC government, exchanging vital information for the development of mutual recognition agreements. The Mutual Recognition Agreements will provide transparency of conformity assessment procedures, thereby facilitating exports of U.S. products without time-consuming and costly retesting in foreign laboratories.

In particular, since the European Community does not accept the designation of foreign organizations as "notified bodies," intensive efforts are currently focused on establishing a voluntary program in the U.S. The U.S. Government will be able to provide, and the EC will be willing to accept, the necessary assurances to the EC of the competence of U.S. conformity assessment systems and organizations.

QUESTION:

Do you consider this program to be a success, or is it too soon to tell?

ANSWER:

Even though the standards advisor has been in place for less than a full calendar year, NIST views the program as successful. It is already beginning to be effective in meeting its objectives.

QUESTION:

What are the objectives of the Brussels standards initiative -- exactly what do you intend to accomplish with this representative?

ANSWER:

The primary objective of placing the standards advisor in Brussels is to ensure the flow of vital standards-related information between the U.S. and this key area of the world. The expert provides liaison with the EC, as well as private standards organizations, sending detailed standards-related information to NIST and transferring U.S. technical information in turn. Of particular importance is information sent back to NIST on conformity assessment practices and negotiations for establishing Mutual Recognition Agreements. This information is essential for U.S. manufacturers and exporters to be able to market their products in Europe without duplicative, costly, and time-consuming testing.

QUESTION:

How does this position relate to the Foreign Commercial Service Office at the U.S. mission to the EC -- is there a direct reporting requirement?

ANSWER:

The NIST standards expert has been assigned to the U.S. and Foreign Commercial Service (U.S. and F.C.S.) for administrative support and oversight. A Memorandum of Understanding between NIST and the U.S. and F.C.S. covers mutually agreed division of technical and administrative responsibilities for this and future assignments of a similar nature.

QUESTION:

Do you see a need to place standards advisors in Russia and other countries of the former Soviet Union to promote U.S. standards?

ANSWER:

Yes, in the future there may be a need to place standards advisors in Russia and other countries of the former Soviet Union to promote U.S. technology and standards. An integral part of the standards project is to assist desiring countries in the development of standards compatible with those in use in the U.S. Actual and anticipated trade patterns with these countries are also relevant. Working with Russia and the other countries of the former Soviet Union will contribute to enhanced export of U.S. goods and services.

QUESTION:

If so, would the most effective means of accomplishing this be in the placement of NIST employees, or could you contract with private consultants or perhaps train Foreign Commercial Service officers to provide this type of assistance?

ANSWER:

The most effective means of staffing posts for standards advisors is to recruit NIST employees from the private sector. Qualified, experienced private sector technical specialists with access to NIST's technical expertise will be instructed as required with respect to government policies and U.S. industry needs.

QUESTION:

Do you see a need to assign U.S. standards advisors in other countries or regions in the world?

ANSWER:

Based on anticipated trade patterns, it may be desirable to assign standards advisors to U.S. Embassies and Missions in Mexico and the Pacific Rim in the future.

QUESTION:

You also refer in your statement (page 7) to harmonizing standards with trading partners and international organizations. Could you describe your efforts in this area? Are U.S. manufacturers receptive to the idea of harmonized standards?

ANSWER:

U.S. manufacturers are generally receptive to all approaches that lead to more ready acceptance of their products in other markets. NIST has seen major strides in this direction in the harmonization of lumber and plywood standards with Canada.

NIST is also involved in joint U.S.-Canada efforts for uniformity in weights and measures standards. Under the North American Free Trade Agreement, NIST sees extension of this cooperation towards harmonization throughout North

America with Mexico joining these enterprises. The development of even more widely accepted international standards and conformity assessment practices will further facilitate trade.

FCCSET Initiative on Advanced Manufacturing Technology

Your statement refers to an increase in your core research programs related to a new Federal Coordinating Council for Science, Engineering and Technology (FCCSET) presidential initiative on Advanced Manufacturing Technologies. You mention that NIST is among several Federal agencies participating in the effort.

QUESTION:

What other agencies are participating in this particular FCCSET initiative?

ANSWER:

DoD, DoI, USDA, DoE, EPA, NASA, & NSF.

QUESTION:

Which agency has the lead on this initiative?

ANSWER:

While some agencies have more resources than others, no agency has the lead. It is a coordinated effort where each agency has something to offer to the planning and coordination process.

QUESTION:

How does the requested NIST increase of $4.2 million for this program compare to other agencies' request? (You may provide details for the record, if necessary.)

ANSWER:

DoD -$182 million, USDA $10 million, DoE -$70 million, NASA $0 million, DoI -$5 million, EPA $1 million, and NSF $26 million.

QUESTION:

Would you explain for the subcommittee what comprises "advanced manufacturing"? How does this differ from what state-of-the-art manufacturing techniques?

ANSWER:

Manufacturing is the process of converting raw material and/or product into useful products. Manufacturing can be continuous, discrete, or intellectual, as illustrated by the chemical, automotive, and software industries. The term "advanced manufacturing technologies" refers to the processes, information, and equipment that are needed for future competitiveness, whereas "state-of-the-art technologies" tend to be those that are currently available "off-the-shelf" and vendor-supported. The members of the FCCSET on Advanced Manufacturing grouped advanced manufacturing technologies into four categories:

- Manufacturing Design Technologies, including tools and techniques used to prepare for manufacturing;
- Manufacturing Technologies, including processes and equipment for the actual production of physical products;
- Supporting Technologies, including underlaying core technologies needed to provide advances in design and manufacturing technologies, and
- Manufacturing Infrastructure Elements, including concepts and mechanisms for managing the development of appropriate technologies and for encouraging their widespread use.

Advanced Technology Program

QUESTION:

Your requested increase for the Advanced Technology Program (ATP) is $132 million over the amounts provided for FY 1993 to date. To what extent does this request reflect the passage of the President's FY 1993 economic stimulus and investment supplemental? If the supplemental funding for ATP is not provided at the requested level, or if the supplemental never passes, would your FY 1994 request need to be modified?

ANSWER:

The $132 million increase requested for the ATP for FY 1994 does NOT depend on the passage of the stimulus package. If the stimulus package had passed, the additional FY 1993 funds would have permitted the ATP to (1) fund a larger percentage of the proposals received in the current competition and (2) announce two new competitions this spring. Without the supplemental, the ATP will fund considerably fewer proposals in the current competition (roughly half as many), and will not announce additional competitions until FY 1994 appropriations are received.

QUESTION:

If the supplemental is enacted, but late in the fiscal year, would your requirements change?

ANSWER:

If the supplemental were approved late in FY 1993, the ATP would still utilize the supplemental funding to support additional projects resulting from the fourth competition and announce two new FY 1993 competitions as originally planned. Because of the delay in receiving the supplemental appropriation, the 40-50 projects selected from the two new competitions would not be announced until the beginning of FY 1994 and second-year funding for these projects would not be needed until FY 1995. A minimum of approximately $68 million would still be required in FY 1994 to sustain projects started in previous years and the administration of those projects. A minimum of four additional competitions would still be planned for FY 1994 using the additional funds requested.

QUESTION:

The Commerce Budget in Brief document indicates that NIST will be defining "broad technology areas" for the FY 1994 competitions. Is this a change in NIST policy -- have technology areas been defined in advanced of the competitions in previous rounds of ATP awards?

ANSWER:

All four competitions announced to date have been open to proposals in all areas of technology. In the future, NIST plans to hold a mixture of open competitions and carefully chosen competitions directed at broad technology areas. The change in policy is necessary to make more effective and timely investments in technology-development projects. It is in keeping with the Administration's policy to more aggressively pursue private-sector/government partnerships to develop critical technologies of substantial long-term importance to enhancing United States economic growth and to creating high-quality jobs. The ATP will continue to be operated as a "bottom-up" program with substantial involvement of the private sector in choosing the technology areas for emphasis in competitions. The broad technology areas will be chosen through a careful analysis of proposals submitted in open competitions (to identify as early as possible, emerging technology development opportunities) and substantial information to be obtained from the private sector through meetings, workshops, conferences, and special technology assessment studies. Note that both H.R. 820 and S. 4 call for NIST to establish a series of advanced manufacturing testbeds that would be remotely accessed though advanced communication networks. If passed, this legislation would result in at least one technology-directed competition either using a portion of the FY 1993 supplemental appropriation (if it is approved) or the FY 1994 increased appropriation.

QUESTION:

Are funds included in this request for additional oversight of the ATP program in FY 1994? Please specify.

ANSWER:

Requested FY 1994 funds include $1.7 million for OIG expenses associated with audits.

QUESTION:

Will NIST be contributing to the proposed Departmental financial management system in this budget request?

ANSWER:

NIST is being billed for this department-wide effort through the DoC reimbursable program.

QUESTION:

Can you tell us anything about the proposals that have come in this year -- are there any significant trends in the applications? What is the mix between individual projects and joint ventures?

ANSWER:

Sufficient funds were available to announce only one new competition in FY 1993 (the fourth ATP competition). The proposals that were received in the current competition cover a very broad range. All of the "critical technologies" identified by the Office of Science and Technology Policy several years ago are represented. Of the 252 proposals received, 32 were submitted by joint ventures and 220 by single companies. The proportion of high-quality proposals continues to increase with each competition. Approximately 25 percent of the proposals submitted in the fourth competition are believed to have sufficient technical merit to be worthy of serious consideration for funding. In the past, the ATP has only had sufficient funding to support less than 10 percent of the proposals submitted.

QUESTION:

What was the total amount requested in the initial round of solicitations for the FY 1993 funding? How many applications have been submitted?

ANSWER:

The total requested from ATP by all of the 252 applicants is approximately $455 million.

Clipper Chip Technology

QUESTION:

We have been hearing quite a bit this week about the new Clipper Chip technology related to computer encoding of electronic communications and the ability of law enforcement agencies to eavesdrop on these communications. How long has NIST been involved in the development of this project?

ANSWER:

NIST has been discussing issues related to escrowed cryptographic key technology for about four years. Clipper Chip technology is one product of these efforts.

QUESTION:

What level of resources has NIST devoted to this project to date, and are funds included in this budget request for the Clipper Chip project?

ANSWER:

NIST expenditures regarding the "Clipper Chip" and escrowed key technologies have involved a significant portion of NIST's computer security budget. Specifically, the level of resources that has been devoted to this technology is approximately four years of professional staff time and travel expenses of about $10,000. No specific funds are requested in this request for the Clipper Chip project.

QUESTION:

Does NIST receive reimbursable funding from the Department of Justice and/or other Federal agencies for this project?

ANSWER:

NIST has received funding from the FBI. NIST has also received funding from DoD, for work related to another cryptographic standard, the Digital Signature Standard and to study a supporting infrastructure for that standard. Additionally, we believe that a rough estimate of NSA expenditures on this technology, in terms of both contract costs and staff time, is approximately $7-8 million.

QUESTION:

There has been some confusion as to what company will be manufacturing this device. Could you tell us which companies are involved, and at what stage of the process they became involved?

ANSWER:

VLSI manufactures the hardware chip while Mikotronx, Inc. of Torrence, CA, designs and programs the device. Both are under contract to the National Security Agency. These contracts were awarded approximately 14 months ago, once the initial designs were completed by the government.

QUESTION:

Are any of the larger telecommunications companies (such as AT&T or any of the Baby Bells) involved in this initiative?

ANSWER:

No such firms were involved in the basic design of the key escrow chip and the encryption algorithm. However, the first version of the Clipper Chip was hardware customized to be compatible with AT&T's Telephone Security Device 3600. In addition, we do intend to license the building of the Clipper Chip to other vendors who can meet our quality and security requirements.

QUESTION:

How were contractors selected for this project?

ANSWER:

Contractors were selected by NSA based on their unique capabilities. We anticipate that future chip production will be done by multiple sources.

QUESTION:

To what extent has NIST been involved in the privacy issue associated with this technology? Could you elaborate for the Subcommittee your findings?

ANSWER:

NIST develops computer security standards for federal unclassified computer systems and is keenly aware of the need to protect Privacy Act and other information sensitive to disclosure. NIST's role in the Clipper Chip technology development has been limited to that of a technical consultant. Privacy issues are beyond NIST's area of expertise.

Advanced Materials and Processing

QUESTION:

You are requesting $6.6 million under your core research programs for an initiative to "bridge the gap" between basic research and technology transfer in the area of advanced materials and processing. Please describe the proposed program.

ANSWER:

The increase will allow NIST to promote industrial technology and innovation, reduce barriers to commercializing new ideas and technologies, and facilitate industry and government efforts to improve the quality of American products and services through research in advanced materials and advanced processing technologies for producing materials identified as critical to the development or maintenance of manufacturing leadership by U.S. industry. The Office of Science and Technology Policy (OSTP) and Office of Management and Budget (OMB) recognize the importance of materials technology in providing greater national security, industrial productivity, and economic growth, and have launched a budget crosscut on the Federal effort in materials science and technology. The Federal Coordinating Council for Science, Engineering and Technology's (FCCSET) Committee on Industry and Technology (CIT) coordinated the development of this interagency effort which led to a new Advanced Materials and Processing Program (AMPP) in the President's Budget. The NIST programs are focused on major priority areas singled out by the AMPP and emphasize applied and process integration aspects of synthesis and processing, as well as measurement science/characterization of relevant materials.

QUESTION:

Is $6.6 million the total amount requested for this program, or are there funds in your base request for this program?

ANSWER:

NIST has a $1.5 million base in the Materials Science and Engineering Laboratory associated with this request. That coupled with resources from NIST laboratories in other technological areas, positions NIST to be a critical participant in programs designed to achieve industrial implementation of advanced materials. NIST has developed a strategy which involves industry in every stage of the R&D program from planning through execution to ensure that the technology developed is relevant to industrial needs and to ensure that it is readily transferred to industry. With NIST's already strong ongoing commitment to U.S. industry's needs, very limited base funds are committed to establishing critical mass research efforts directed at the measurement needs of these new areas identified by industry.

QUESTION:

Isn't this the type of work that should be conducted under the manufacturing outreach program?

ANSWER:

The proposed Advanced Materials and Processing program is directed toward the creation of new technology or joint technology development with industry and is not directed toward the transfer of existing technology to industry. The NIST manufacturing outreach program is focused primarily on the diffusion or transfer of information to industry and does not contain the necessary program elements for technology development and is not focused on advanced materials and processing, but rather manufacturing.

Request to OMB

QUESTION:

What was your original request to OMB for all of your accounts and activities, what specific items were eliminated from your request, and what will be the impact of these reductions on NIST's ongoing operations? Please provide details for the record.

ANSWER:

The following table illustrates NIST's request to OMB and the changes made before submission to the Congress. The total request for NIST is greater after OMB completed its review. The areas which were reduced or eliminated were modest. The results of these reductions will be to slow the rate of increase to NIST measurement research programs that support industry and increase the rate of growth in High Performance Computing and the NIST extramural programs.

National Institute of Standards and Technology
FY 1994 Budget Requests to OMB and Congress
(Dollar amounts in thousands)

Appropriation/Budget Subactivity/Program	Total OMB Request	President's Request to Congress
Scientific and Technical Research and Services:		
Electronics and Electrical Engineering	33,564	30,668
Electronics	[3,250]	[4,000]
Manufacturing Engineering	19,810	14,400
Advanced Manufacturing	[6,250]	[4,200]
Chemical Science and Technology	25,525	23,054
Biotechnology and Chemical Processing	[4,150]	[3,000]
Physics	28,810	26,884
Materials Science and Engineering	48,810	47,236
Advanced Materials and Processing	[3,000]	[6,600]
Building and Fire Research	14,118	12,873
Safety, Health, and Environment	[1,500]	[. . .]
Computer Systems	20,268	37,080
HPCC/Information Infrastructure	[2,000]	[24,000]
Applied Mathematics and Scientific Computing	7,086	7,002
Technology Assistance	15,771	10,534
International Trade and Standards	[4,000]	[2,000]
Evaluated Reference Data	[1,000]	[. . .]
Research Support Activities	27,488	31,257
Technical Competence Program	[1,500]	[. . .]
Postdoctoral Fellowhip Program	[0]	[. . .]
Total, STRS Request	**241,250**	**240,988**
Industrial Technology Services:		
Advanced Technology Program	120,015	199,489
Technology Transfer and Outreach		
Manufacturing Extension Partnership	25,350	30,235
Quality Program	2,500	2,800
Total, ITS Request	**147,865**	**232,524**
Facilities:		
Facilities Construction and Improvements		
Modifications and Improvements	10,014	. . .
Construction and Major Renovations	13,400	. . .
Total, Facilities Request	**23,414**	. . .
Construction of Research Facilities:		
Construction and Major Renovations	. . .	61,686
Total, NIST Request	**412,529**	**535,198**

NOTE: STRS amounts in brackets represent program initiatives requested in the FY 1994 budget process.

Facilities Proposal

QUESTION:

You are requesting $61,686,000 for the Construction of Research Facilities account for FY 1994. A requested language change would allow you to use some of these funds for architectural and engineering design. What amount of this request is anticipated to be required for A&E work?

ANSWER:

The plan estimates the remaining requirements for the design of the ATLs and new construction in both Gaithersburg and Boulder are $21 million. An additional $15,000,000 is estimated for the designs required for the planned renovations at $5,000,000 a year from FY 1996 through FY 1998.

QUESTION:

How much has been obligated to date for A&E work on the Gaithersburg and Boulder facilities? Have any studies actually been started?

ANSWER:

To date, $1,944,592 has been obligated. Henningson, Durham, and Richardson, Inc., have started the geotechnical and vibration studies.

QUESTION:

What more remains to be done in A&E studies for the facilities modernization program? Will additional funds for A&E be required after FY 1994.

ANSWER:

In addition to the design for new construction, there will be design work required for the planned renovation of seven of the current laboratories. This design work is scheduled to take place in FYs 1996 through 1998. The total cost for the renovation design is estimated to be $15,000,000.

QUESTION:

Last year, we were told that this facilities proposal would be a ten year effort. Is that still on track, considering the slight delay in getting the program off the ground in FY 1993?

ANSWER:

NIST's plans and estimate have not changed. If funding is provided in out years, as requested, we expect the ATLs to be completed and occupied in 1997. All planned renovation should be completed and occupied by the year 2001.

QUESTION:

Please provide for the record an updated timeline for completion of the facilities modernization proposal for each NIST site.

ANSWER:

See the attached graphs.

QUESTION:

Have there been any other changes in your plans for modernization that may impact the costs and timeframe for completion of this proposal?

ANSWER:

No, the program is proceeding as envisioned at this time.

Authorization Status

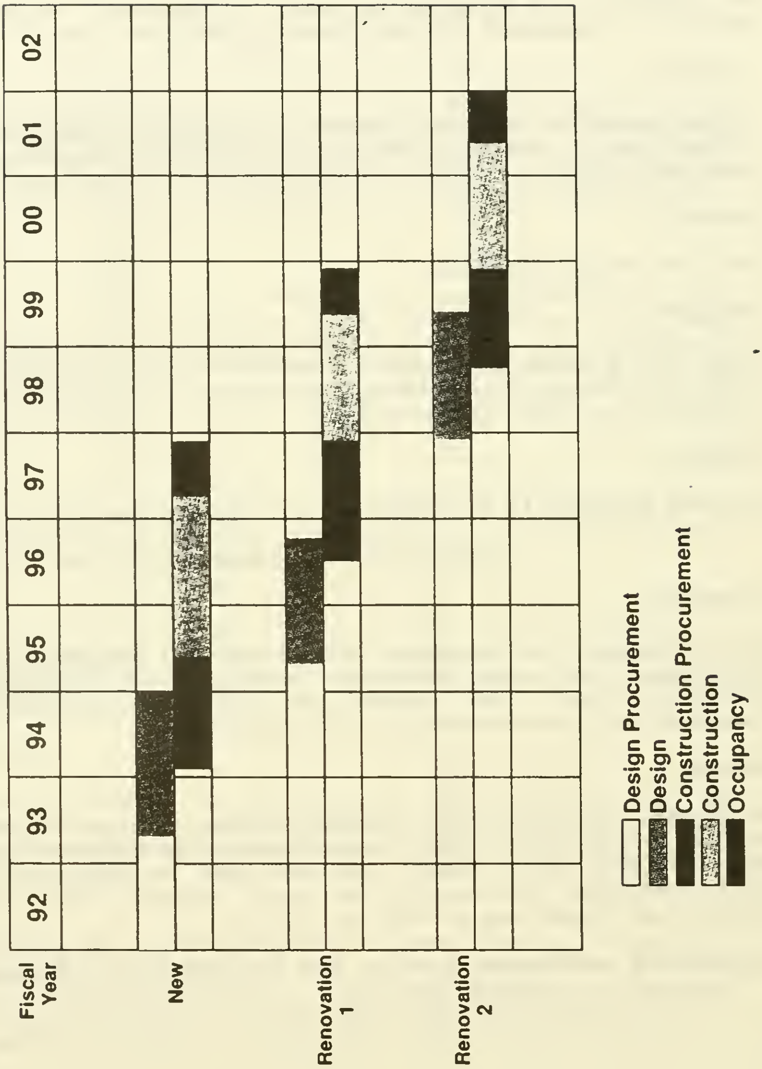
QUESTION:

We discussed the pending authorization proposal with Dr. Lyons at the earlier hearing on Technology Administration. Mr. Kammer, do you have any further comments on these authorization proposals?

ANSWER:

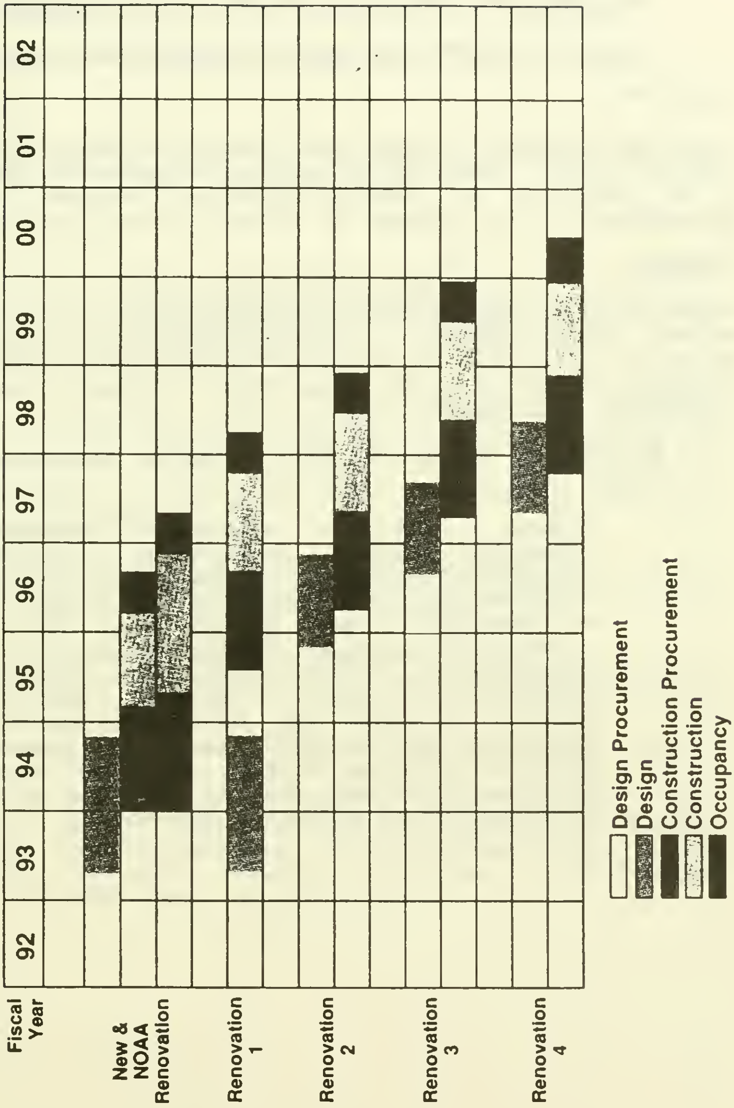
H.R. 820, the National Competitiveness Act, which will authorize appropriations for the Technology Administration and NIST for Fiscal Years 1994 and 1995 is scheduled for full committee mark-up by the House Science, Space and Technology Committee on May 12, 1993.

The Senate counterpart, S. 4, has not yet been scheduled.



NIST Capital Improvement Plan
Gaithersburg

NIST Capital Improvement Plan Boulder



NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Question Submitted by Congressman Bob Carr

QUESTION:

NIST has received a major increase in funding from this Administration. What is the relative priority of funding -- an increase in funding existing Centers or the development of the network of Centers around the country?

ANSWER:

Development of the network of Centers around the country is a very high priority. The Administration's views are explained clearly in the document "Technology for America's Economic Growth, A New Direction to Build Economic Strength". It states:

> To enhance the use of and access to technology, we will:
>
> - Create a national network of manufacturing extension centers. Existing manufacturing extension centers managed through the Department of Commerce provide assistance to a small number of businesses, but service must be greatly expanded to give all businesses access to the technologies, testing facilities, and training programs they need. Federal funds (to be matched by state and local governments) and funds from the private sector will support and build on existing state, local and university programs, with the goal of creating a nation-wide network of extension centers.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Question Submitted by Congressman David Skaggs

QUESTION:

Please provide information on the reduction-in-force impacting the Boulder computing facility.

ANSWER:

- o The User Service and Systems Support Group (Boulder, Colorado) in the Computer Services Division of the Computing and Applied Mathematics Laboratory will be abolished as of May 14, 1993.

- o Alan R. Thomas, Director of NOAA's Environmental Research Laboratories (ERL) notified NIST by memorandum on August 17, 1992, of ERL's intention to discontinue the use of the CYBER 840 computer system in Boulder, Colorado, on or before April 1, 1993. The CYBER 840 computer system in Boulder is operated by NIST.

- o This notification affected eleven employees in the Computer Services Division Office whose primary function was the support of the CYBER 840 system.

- o Of the number affected, three employees were offered and accepted positions elsewhere in NIST and another offer is in process.

- o The remaining seven persons currently have no offers.

- o Sam Kramer, Associate Director of NIST, and Esther Cassidy of NIST's Congressional and Legislative Affairs Office met with Adam Goldberg of Congressman Skaggs' staff on December 14, 1992, to give a briefing on the Boulder Facility's reduction-in-force plans.

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